BLM LIBRARY
88045151

Proposed
ARIZONA STRIP DISTRICT
RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT



DECEMBER 1990
U.S. Department of the Interior
Bureau of Land Management
Arizona Strip District

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

88045151

QH
76.5
.A6
A7496
1990

ARIZONA STRIP DISTRICT

RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

· FINAL ·

DECEMBER 1990

U.S. Department of the Interior
Bureau of Land Management
Arizona Strip District

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

ARIZONA STRIP DISTRICT

RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

FINAL

DECEMBER 1990

U.S. Department of the Interior
Bureau of Land Management
Arizona Strip District

Dear Reader:

The document accompanying this letter is the Proposed Arizona Strip District Resource Management Plan and Final Environmental Impact Statement (RMP/EIS). This FEIS analyzes the impacts expected from implementing the Proposed Arizona Strip RMP. The plan, if approved, will guide the BLM in its management of the Arizona Strip District, covering parts of Mohave and Coconino counties.

The Proposed Arizona Strip RMP is a modified version of the preferred alternative analyzed in the Draft Arizona Strip RMP/EIS published in November 1989.

Any participant in this planning effort who has an interest which is or may be adversely affected by the approval of the Proposed RMP, or any part of it, may protest such approval. The protest may raise only those issues which were submitted for the record during the planning process.

Protests must be in writing and filed with the Director (760), Bureau of Land Management, Room 909, Premier Building, 18th and C Streets NW, Washington D.C. 20240, by the date stamped on the title page following this letter.

Protests must include the following information: 1) The name, mailing address, telephone number and interest of the person filing the protest; 2) A statement of the issue or issues being protested; 3) A statement of the part or parts of the plan being protested; 4) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; 5) A concise statement explaining why the State Director's decision is believed to be wrong.

Except for any portions under protest, the Proposed RMP will become final after thirty (30) days. A Record of Decision (ROD) will be prepared documenting the final decision of the State Director. The ROD will be made available to the public through a Federal Register notice.

I wish to thank all of you who have participated in this planning effort and to encourage you to take part again at the next opportunity.

Sincerely,

G. William Lamb
Arizona Strip District Manager

ARIZONA STRIP DISTRICT

RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Draft ( ) Final (X)

The United States Department of the Interior, Bureau of Land Management

1. Type of Action: Administrative (X) Legislative ( )

2. Abstract: This Final Resource Management Plan and Environmental Impact Statement describes the proposed actions for managing the public land and resources in the Arizona Strip District, Arizona.

3. Comments have been requested from the individuals, groups and agencies listed in Chapter V.

4. For further information contact:

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770
Telephone: (801) 673-3545

5. Final filed with the Environmental Protection Agency:

6. Comments on this Final RMP/EIS must be postmarked no later than:

Recommended:

G. William Lamb
District Manager
Arizona Strip District Office

Approved:

Les Rosenkrance
State Director
Arizona State Office

TABLE OF CONTENTS

SUMMARY

Introduction S-1
The Planning Area S-1
The Planning Process S-1
Alternatives Considered S-2
Proposed Resource Management Plan S-2

CHAPTER I - PURPOSE AND NEED

Purpose I-1
Description of the Planning Area I-1
Planning Process Overview I-2
Planning Issues I-4
Planning Criteria I-5
Basic Criteria I-5
Specific Criteria for Issue Identification I-6

CHAPTER II - PROPOSED PLAN

Introduction II-1
Plan Objectives and Guidelines II-1
Districtwide Objectives II-2
Management Guidelines II-3
The Range of Alternatives II-3
Alternatives Considered but not Analyzed II-4
The Proposed RMP II-4
Monitoring and Evaluating the Proposed RMP II-6

CHAPTER III - AFFECTED ENVIRONMENT

Land Resources III-1
Mineral Resources III-3
Cultural Resources III-7
Vegetation III-11
Watershed Resources III-12
Special Status Species III-15
Riparian Areas III-17
Forest/Woodland Resources III-19
Grazing Management III-20
Wild, Free-roaming Burros III-20
Wildlife Habitat III-21
Recreation Resources III-22
Wilderness Management III-24
Visual Resources III-27
Transportation/Access III-28
Social and Economic Conditions III-28
Cumulative Changes in the Existing Environment (1976-1989) III-31

CHAPTER IV - ENVIRONMENTAL CONSEQUENCES

Impacts to Land Resources IV-1
Impacts to Mineral Resource Development IV-3
Impacts to Cultural Resources IV-6
Impacts to Soil, Water and Air Resources IV-7
Impacts to Special Status Species IV-9
Impacts to Riparian Areas IV-11
Impacts to Forest/Woodland Resources IV-12
Impacts to Grazing Management IV-15
Impacts to Wildlife Resources IV-17

TABLE OF CONTENTS (Continued)

Impacts to Recreation Resources IV-19
Impacts to Visual Resources IV-24
Impacts to Wilderness IV-27
Impacts to Transportation/Access IV-27
Impacts to Socio-Economic Resources IV-29
Impacts to Adjoining Lands IV-31
Cumulative Impacts IV-36

CHAPTER V - CONSULTATION AND COORDINATION
Introduction ..... V - 1
List of Preparers V-1
Arizona Strip District and State Office Assistance V-2
Scoping (Issue Identification) V-3
Public Involvement and Consultation During Development of the Draft RMP/EIS V-3
List of Agencies, Organizations, and Persons to Whom Copies of this Statement will be Sent V-4
Public Comments on the Draft RMP/EIS V-5
Response to General Public Comments V-5
General Response to Public Comments V-6
Reproduced Comment Letters and BLM's Specific Responses V-11

APPENDICES, GLOSSARY, REFERENCES, AND INDICES
Appendices A-1
Glossary A-79
References A-92
Index to Comments A-96
Index A-101

LIST OF APPENDICES

APPENDIX		PAGE
1	- Allotment Categorization	A-1
2	- Rangeland Trend	A-5
3	- Allotment Categorization Criteria	A-8
4	- Resource Monitoring and Evaluation Plan	A-9
5	-Reclamation Stipulations	A-13
6	-Area of Critical Environmental Concern Evaluation	A-15
7	-Public Lands Identified For Disposal By Sale Or Exchange	A-28
8	-Land Identified For Acquisition	A-31
9	- Availability Of Lands For Fluid Leasable Mineral Activity Relative To Resource Potential - Proposed Plan	A-43
10	-Cultural Resource Management Guidelines	A-45
11	-Watershed Condition Categorization Of Grazing Allotments Within Arizona Strip District	A-48
12	-State Special Status Animals And Plants That Occur Or Could Occur In RMP Area	A-50
13	-Federally Listed And Candidate Category 1 And 2 Plant And Animal Species Considered For Analysis	A-52
14	-HMP Objectives - Vermillion Resource Area	A-53
15	-HMP And HMAP Objectives - Shivwits Resurce Area	A-54
16	-Desert Tortoise Habitat Categorization	A-55
17	-ROS Setting Descriptions	A-60
18	-Wild And Scenic Rivers - Eligibility, Classification, And Suitability	A-61
19	-Off-Highway Vehicle Designations	A-66
20	-Visual Resource Management Classes	A-67
21	-Legal Vehicular Access Acquistion (Approximate Locations)	A-68
22	-Mineral Potential Classification System	A-69
23	-Determination Of Erosion Condition Class Soil Surface Factors (SSF)	A-70
24	-Category 2 Candidate Species	A-71
25	-Priority, Endangered, Threatened Or Sensitive Wildlife Species Associated With Riparian Areas	A-72
26	-Special Status Plant Species - Arizona Strip District	A-73
27	-Summary Of Past Activity And Projections For Oil And Gas Development	A-74
28	-Reasonable And Forseeable Mineral Development Impacts	A-75
29	-RMP Alternative Development Process	A-76
30	-Forest Management Categories	A-77
31	-Withdrawls	A-78

LIST OF FIGURES

FIGURE		PAGE
I-1	Steps In The Resource Management Planning Process	I-3
III-1	Typical Breccia PipeUranium Deposit	III-3

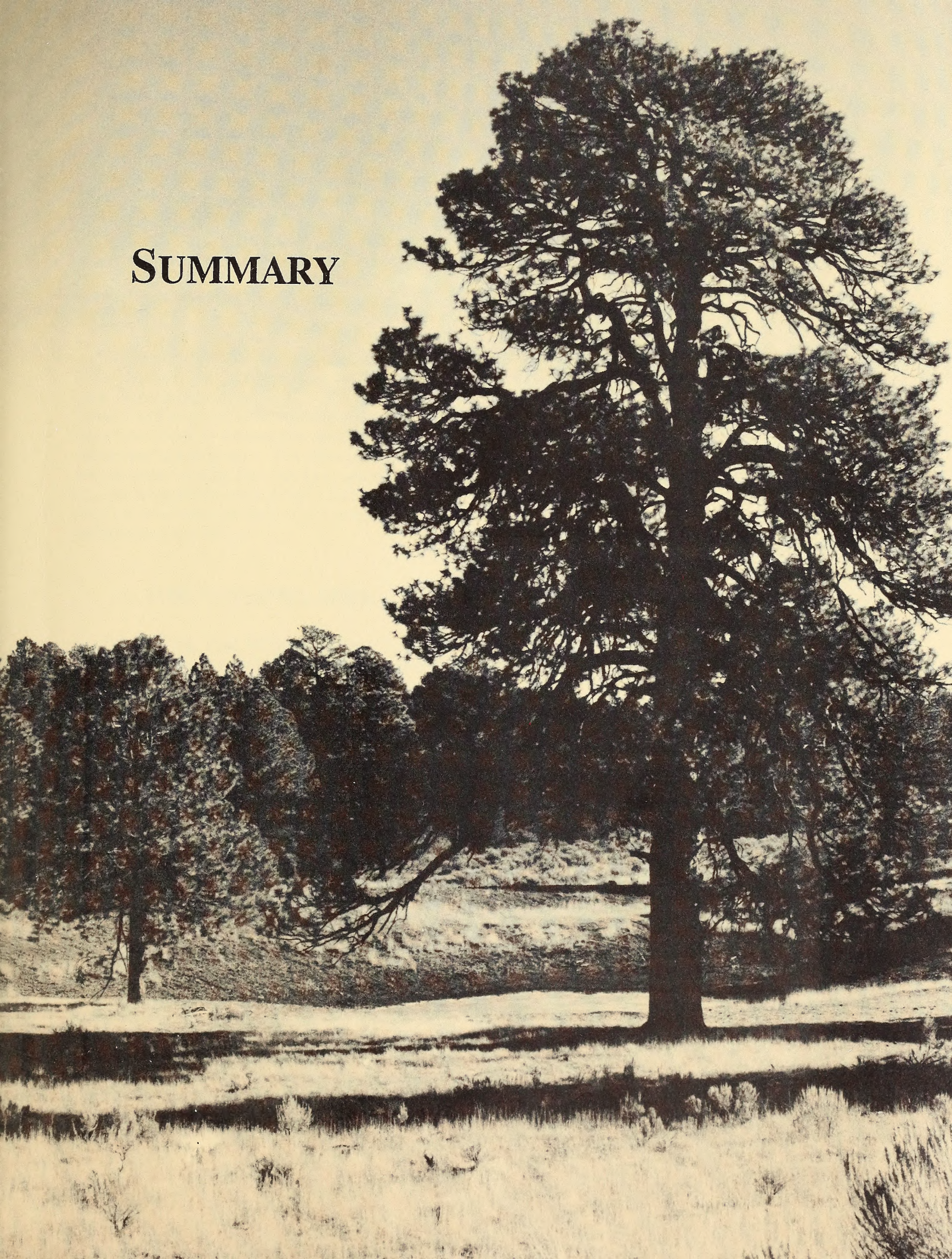
LIST OF TABLES

TABLE		PAGE
S-1	Special Management Areas Proposed for the Arizona Strip	S-3
I-1	Land Surface Administration, Arizona Strip	I-2
II-1	Description Of Alternatives	II-7
II-2	Management Prescriptions For Special Management Areas	II-40
III-1	Public Land Acres (Surface And Mineral Ownership) BLM, Arizona Strip District	III-1
III-2	R&PP Lease and Patent Acreages on the Arizona Strip District By County And Type Of Use	III-1
III-3	Land Use Authorizations On The Arizona Strip District By Resource Area And Type Of Use	III-2
III-4	Payments In Lieu Of Taxes	III-3
III-5	Mineral Resource Potential Ratings	III-4
III-6	Uranium Exploration / Development Activities on the Arizona Strip District	III-8
III-7	Gypsum Exploration / Development Activities on the Arizona Strip District	III-9
III-8	Other Mineral Exploration / Development Activities on the Arizona Strip District	III-9
III-9	Vegetation Types of the Arizona Strip District	III-11
III-10	Erosion Condition Classes (Federal Acres) on the Arizona Strip District	III-12
III-11	Watershed Categorizations on the Arizona Strip District	III-12
III-12	Air Pollutant Annual Averages And Maximum Short-Term Concentrations Measured By Region	III-14
III-13	Priority Riparian Areas on the Arizona Strip District	III-18
III-14	Authorized Woodland Sales on the Arizona Strip District	III-19
III-15	Allotment Categorization Summary on the Arizona Strip District	III-20
III-16	Current And Implemented Allotment Grazing Systems on the Arizona Strip District	III-20
III-17	Pronghorn Habitation Areas On The Arizona Strip as of January 1989	III-21
III-18	Populations Of Desert Bighorn Sheep On The Arizona Strip as of January 1989	III-22
III-19	Recreation Experience Opportunities By ROS Class	III-23
III-20	ROS Class Acreage on the Arizona Strip District	III-23
III-21	Visitor Use In Extensive Recreation Management Areas (1987) on the Arizona Strip District	III-25
III-22	Additional Areas on the Arizona Strip District With Outstanding Recreation Opportunites	III-25
III-23	Visitor Use In Wilderness Areas On The Arizona Strip District (1987)	III-27
III-24	Scenic Quality Acreages On The Arizona Strip District	III-27
III-25	Visual Resource Management Acreage By VRM Class on the Arizona Strip District	III-28
III-26	Transportation / Access Routes on the Arizona Strip District By Type of Access	III-28
III-27	Population And Per Capita Income For Selected Counties in Arizona, Utah, and Nevada	III-29
III-28	Nonfarm Employment on the Arizona Strip District By Sector: 1987	III-30
III-29	Nonfarm Employment on the Arizona Strip District By Arizona Community: 1985	III-30
III-30	Nonfarm Average Weekly Earnings on the Arizona Strip District: 1987	III-30
III-31	Cumulative Changes In Land Surface, 1976 - 1989	III-33
IV-1	Summary of Impacts To Priority Riparian Areas from the Proposed Plan	IV-13

LIST OF MAPS

MAP		PAGE
S-1	Arizona Strip Location Map	S-5
S-2	Surface Ownership	S-6
II-1	Guideline Areas	II-51
II-2	Implementation of Management Guidelines	II-52
II-3	Proposed Land Ownership Adjustments and Utility Corridors	II-53
II-4	Desert Tortoise Habitat Categories	II-54
II-5	Fluid Mineral Leasing Categories	II-55
II-6	Special Management Areas	II-56
II-7	Watershed Allotment Categories	II-57
II-8	Peregrine Falcon Habitat	II-58
II-9	Woodland Harvest Areas	II-59
II-10	Ponderosa Pine Areas	II-60
II-11	Special Recreation Management Areas	II-61
II-12	Proposed Visual Resource Management Guidelines	II-62
II-13	Wild And Scenic River Eligibility And Classification -Virgin River	II-63
II-14	Wild And Scenic River Eligibility And Classification -Paria River	II-64
II-15	Off-Highway Vehicle Designations	II-65
II-16	Fire Management Zones	II-66
III-1	Oil and Gas Resource Potential	III-37
III-2	Non-Metallic Mineral Resource Potential	III-38
III-3	Metallic Mineral Resource Potential	III-39
III-4	Uranium Resource Potential	III-40
III-5	Salable Mineral Resource Potential	III-41
III-6	Mining Claims	III-42
III-7	Locatable Mineral Resource Exploration Sites and Mines	III-43
III-8	Existing Roads Including Temporary Mineral Access	III-44
III-9	Vegetation	III-45
III-10	Erosion Condition	III-46
III-11	Slightly Saline Soils	III-47
III-12	Special Status Plant Habitats	III-48
III-13	Riparian Areas	III-49
III-14	Burro Habitat	III-50
III-15	Wildlife Habitat Management Areas	III-51
III-16	Pronghorn Antelope Habitat	III-52
III-17	Bighorn Sheep Habitat	III-53
III-18	Mule Deer Habitat	III-54
III-19	Turkey Habitat	III-55
III-20	Kaibab Squirrel Habitat	III-56
III-21	ROS Classes	III-57
III-22	Visual Resource Management Existing Guidelines	III-58

SUMMARY



SUMMARY

INTRODUCTION

This proposed resource management plan (RMP) and environmental impact statement (EIS) identifies management prescriptions for managing public lands administered by the Bureau of Land Management (BLM) on the Arizona Strip District. The RMP/EIS provides direction for managing public land resources in the Shivwits and Vermillion Resource Areas through the year 2005.

BLM's land use planning is accomplished under the authority of and in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA). The plan was prepared by an interdisciplinary planning team composed of a variety of specialists and the district management team. The plan is the result of a concentrated step-by-step planning effort over the past three years with substantial public involvement. The BLM Arizona State Office also provided technical assistance and review.

THE PLANNING AREA

The planning area, hereafter referred to as the district, encompasses about 2.8 million acres of public lands in the northwest corner of Arizona known as the Arizona Strip (Map S-1). Isolated from the rest of Arizona by the deep canyons of the Colorado River, this area is geographically, culturally, and economically linked with southern Utah. The district encompasses the northern portion of Mohave and Coconino counties and includes large blocks of public land administered by BLM.

The district has few communities and a low population. The only permanent residents live in small communities near the Utah and Nevada borders and along Highway 89A in House Rock Valley.

This distinctive part of Arizona has a special appeal to many people and is unique in many ways. The Grand Canyon limits accessibility from the south, and unimproved roads discourage use from the north. Spectacular scenic vistas are common and remoteness and solitude can be found among rough scenic canyons and occasional stands of ponderosa pine. Approximately 265,600 acres of public lands have been designated by congress as part of the National Wilderness Preservation System and are managed by BLM.

A wide variety of multiple uses occur within the district, with public use has increasing steadily over the years. The principal industries using public lands are ranching, tourism and mineral exploration and devel-opment. Livestock grazing has been, and continues to be, a major use of public lands since the 1880s. Over 135 ranchers graze 23,485 cattle annually on the district.

The district provides a wide array of dispersed recreation opportunities, ranging from sight-seeing by vehicle to wilderness backpacking. The primary attraction of the Strip is the opportunity to engage in recreational activities in remote, unregulated settings. In contrast, the Strip is surrounded by nationally significant recreation areas administered by the National Park Service which offer similar spectacular vistas, but in more regulated environments. The remoteness of the Strip complements the recreation experience of the region.

Uranium exploration and development have occurred over the past decade. The uranium mined to date has been in unique breccia pipe structures. Due to the vertical columnar structure of the breccia pipe, mining occurs underground. Typical surface disturbance for this type of mine is 15 to 20 acres per mine. The estimated cumulative area disturbed by uranium exploration and development from 1980 through 1988 is 766 acres.

THE PLANNING PROCESS

The RMP/EIS is prepared in accordance with the BLM planning regulations. Decisions in this RMP will update or, in many cases, replace land use planning decisions in the Shivwits and Vermillion Resource Area Management Framework Plans (MFPs).

The RMP/EIS responds to resolving issues identified during the scoping process. The original issues included lands, recreation, minerals, access, cultural resources and special designations. However, the plan addresses most public land uses. The plan focus has changed, due to additional public comments, to more fully address forest management.

Objectives and guidelines were established as an integral part of the planning process to guide the development of the proposed RMP. Prominent districtwide objectives are as follows:

- Manage for multiple use

- Protect unique features and special resource values

- Maintain remote/backcountry character

- Cooperate with other agencies having jurisdiction on adjacent lands

Recognizing that some public lands are more sensitive to multiple uses than others because of special qualities, concerns, or conflicts, two general types of areas (area A and area B) were identified in the planning process. Guidelines were developed for these areas to guide RMP decisions. Even though these areas are not management designations or management units, the decisions for these areas complement and meet the objectives and guidelines for the specific geographic area.

ALTERNATIVES CONSIDERED

Four alternative plans were developed for the draft RMP/EIS after considering a wider range of alternatives. During scoping an alternative was suggested that would include large areas withdrawn from mineral entry. However, this proposal was rejected because withdrawals were not warranted and the alternative would not be consistent with the Bureau's mission.

PROPOSED RESOURCE MANAGEMENT PLAN

The proposed RMP represents a diverse combination of balanced uses. It provides a responsive approach to the planning issues, resolution of conflicts, special management area designation and cooperation with adjacent federal and state land managing agencies and private lands (Map S-2).

Current multiple uses would continue, but may be constrained due to management or enhancement of other resource values. No new lands have been withdrawn from mineral entry. Multiple uses that occur include, but are not limited to diverse kinds of recreation, livestock grazing, mineral exploration and development, wildlife development and utilization, watershed, wild burros, woodland products, forest management, designated wilderness, cultural resources, visual resources, riparian, special status species, rights-of-way, and community expansion needs.

Thirteen special management areas, ten areas of critical environmental concern (ACECs) and three resource conservation areas (RCAs), are included in the proposed RMP. These areas remain open to multiple use, but more intense management is proposed to preserve the areas special values. The special management areas and the special values and acreages involved are listed in Table S-1.

Following is a brief overview of each proposed RMP planning issue:

Lands

About 25,188 acres near existing communities would be available to meet long-term public goals/plans. Active acquisition and exchange programs are proposed to acquire 161,800 acres of state lands. The city of Page, Arizona anticipates the need for expanded airport facilities within the next decade. BLM would continue to work with city and county officials, the Federal Aviation Administration (FAA), and other agencies in considering and evaluating possible sites. Ferry Swale, identified as a possible airport site, would not be made available until all reasonable sites located in Arizona, Utah and the Navajo Nation have been assessed. If Ferry Swale is documented as the best airport site, the BLM would further consider the proposal.

Recreation

Diverse kinds of dispersed recreation opportunities would be provided over most of the district. Management on 838,000 acres would be under visual resource management (VRM) Class II guidelines. In these areas remote backcountry characteristics and associated recreation values would be maintained.

Minerals

Lands available for mineral development would continue to be open to mineral activities. Mineral activities would be subject to special reclamation stipulations similar to those used by existing uranium mining companies. These stipulations would help preserve the natural characteristics of the Strip.

Access

All of the district would receive some form of off-highway vehicle (OHV) designation such as open, closed, limited to existing roads and trails, or limited to designated roads and trails. In general, OHV would become more regulated. One small area would be open for unrestricted OHV use. (See Appendix 19 for OHV designation definitions.)

Cultural Resources

Six areas of critical environmental concern (ACECs) would be established to focus priority management on cultural resources (Table S-1). Cultural properties in other areas throughout the district would continue to be managed under current laws, regulations, and policies.

Special Designations

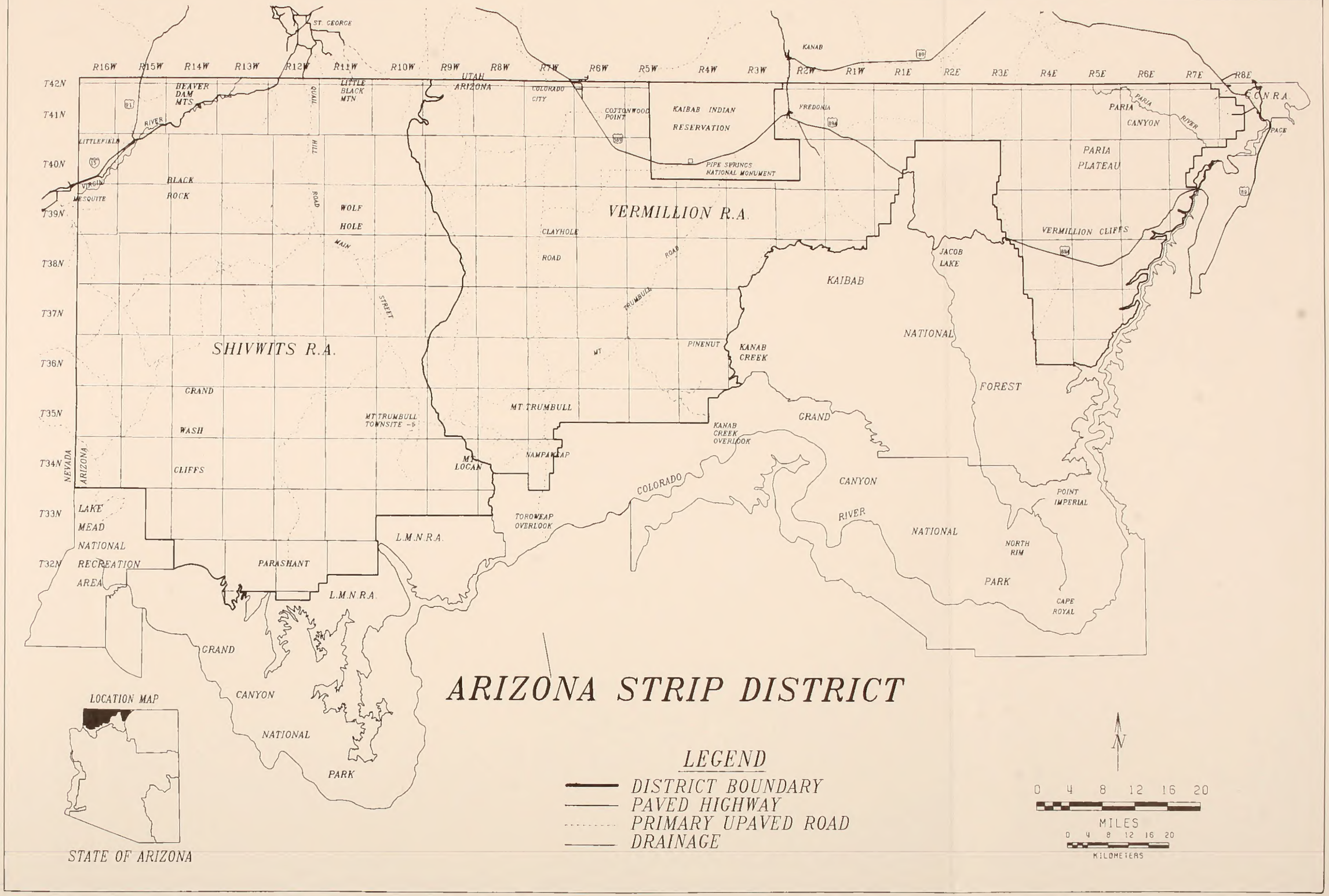
Special designations are proposed for thirteen areas (Table S-1) to manage and/or protect sensitive plant and animal species, cultural resources, scenic and riparian values. The designations would provide focused management to ensure the special resource values are preserved.

TABLE S-1

SPECIAL MANAGEMENT AREAS PROPOSED FOR THE ARIZONA STRIP DISTRICT

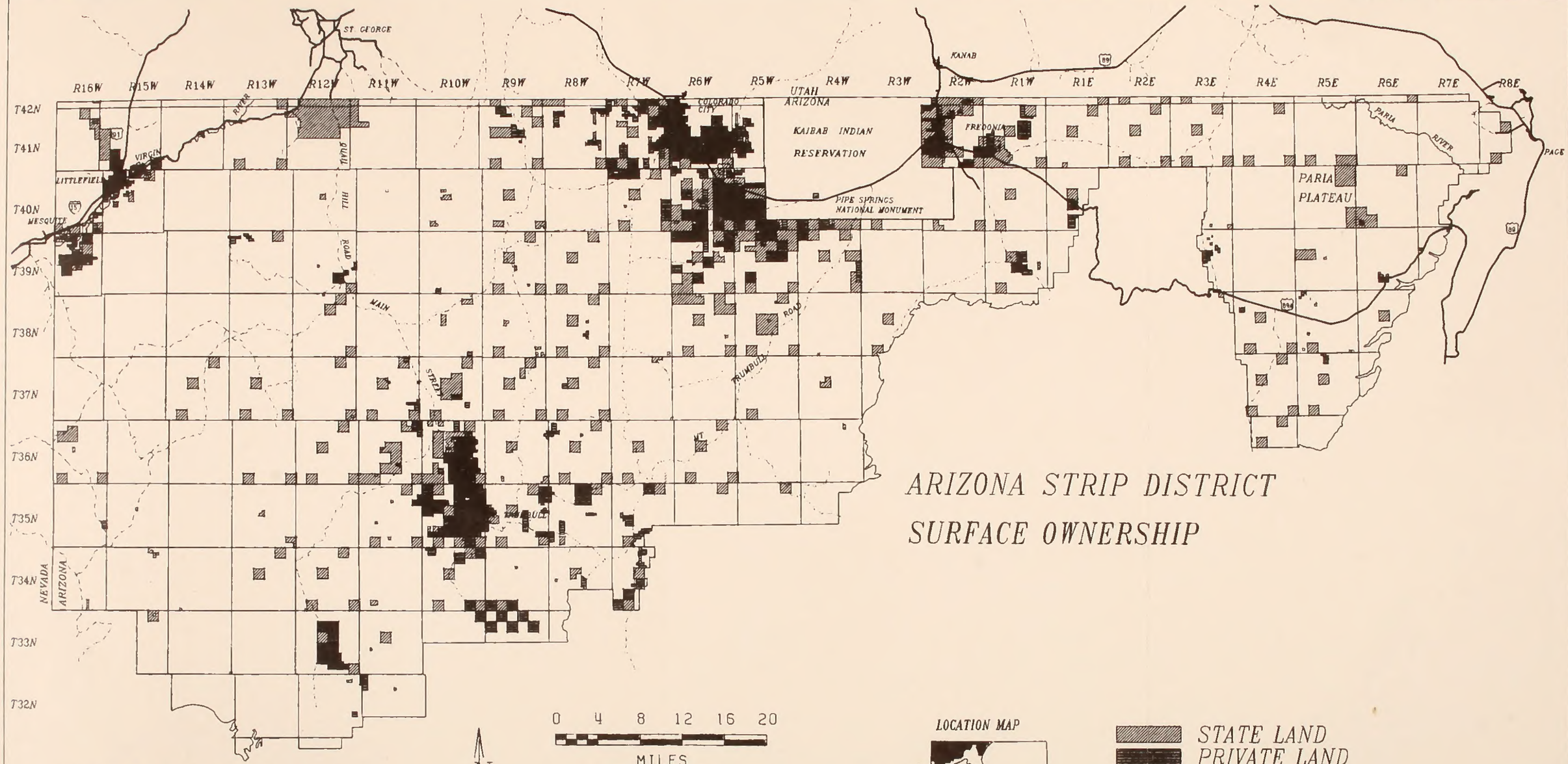
Areas	Resource	Acres
	Areas Of Critical Environmental Concern (10)	
Beaver Dam Slope	Desert Tortoise	20,800
Virgin River Gorge	Scenic, Riparian	8,100
Little Black Mountain	Cultural Resources	200
Fort Pierce	Endangered Cacti, Critical Watershed	900
Marble Canyon	Endangered Cacti	10,700
Johnson Spring	Cultural Resources, Endangered Cacti	2,400
Lost Spring Mountain	Cultural Resources, Endangered Cacti	9,800
Moonshine Ridge	Cultural Resources, Endangered Cacti	5,500
Witch Pool	Cultural Resources	260
Nampaweap	Cultural Resources	550
SUBTOTAL		59,210
	Resource Conservation Areas (3)	
Parashant	Wildlife, Scenic, Recreation, Grazing, Watershed	37,000
Mt. Trumbull	Wildlife, Scenic, Recreation, Cultural, Ponderosa Pine forest, Grazing, Watershed	79,000
Paria Plateau	Cultural Resources, Scenic, Recreation, Watershed, proximity to Wilderness	227,000
SUBTOTAL		343,000
GRAND TOTAL		402,210




ST. GEORGE
R16W R15W R14W R13W R12W R11W R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E
T42N
T41N
T40N
T39N
T38N
T37N
T36N
T35N
T34N
T33N
T32N
UTAH
ARIZONA
NEVADA
ARIZONA
KANAB
FREDONIA
COLORADO CITY
COTTONWOOD POINT
KAIBAB INDIAN RESERVATION
PIPE SPRINGS NATIONAL MONUMENT
BEAVER DAM MTS.
LITTLE BLACK MTN
DOUG HILL ROAD
WOLF HOLE MAIN STREET
BLACK ROCK
VIRGIN RIVER
LITTLEFIELD
MESQUITE
VERMILLION R.A.
CLAYHOLE ROAD
TRUMBULL ROAD
SHIVWITS R.A.
MT TRUMBULL TOWNSITE -5
MT TRUMBULL
MT LOGAN
NAMPAWEAP
PINENUT MT
KANAB CREEK
KANAB CREEK OVERLOOK
TOROWEAP OVERLOOK
GRAND WASH CLIFFS
LAKE MEAD NATIONAL RECREATION AREA
PARASHANT
L.M.N.R.A.
L.M.N.R.A.
GRAND CANYON NATIONAL PARK
COLORADO RIVER
GRAND CANYON NATIONAL PARK
KAIBAB NATIONAL FOREST
JACOB LAKE
VERMILLION CLIFFS
PARIA CANYON
PARIA RIVER
PARIA PLATEAU
C.N.R.A.
PAGE
POINT IMPERIAL
NORTH RIM
CAPE ROYAL
LOCATION MAP
STATE OF ARIZONA
ARIZONA STRIP DISTRICT
LEGEND
DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UPAVED ROAD
DRAINAGE
N
0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS

Map S-1 S-5





ARIZONA STRIP DISTRICT
SURFACE OWNERSHIP

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



CHAPTER I
PURPOSE AND NEED



CHAPTER I
PURPOSE AND NEED

This Arizona Strip District resource management plan/environmental impact statement (RMP/EIS) will guide BLM's management of 2.8 million acres of public lands in the Shivwits and Vermillion Resource Areas through the year 2005. Sections 102 and 202 of the Federal Land Policy and Management Act (FLPMA) require the Secretary of the Interior to develop land use plans for all public lands. This RMP/EIS conforms with FLPMA and BLM planning regulations, 43 CFR 1600.

The National Environmental Policy Act (NEPA) requires federal agencies to prepare EISs on major federal actions. Since the RMP is a major federal action, this RMP is accompanied by an EIS. The EIS documents the potential environmental impact of implementing the preferred RMP alternative as well as other alternatives and conforms to the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1500).

PURPOSE

This RMP/EIS is focused on resolving six key planning issues associated with management of public lands on the district. These issues were identified during BLM's scoping process which began on July 22, 1987 when BLM published a Notice of Intent (NOI) to prepare an RMP/EIS in the Federal Register. Following the issuance of the NOI, BLM held several public meetings and sent RMP Advisories asking the public to identify issues to be considered in the RMP/EIS. A detailed description of the scoping process is presented in Chapter V, Consultation and Coordination.

This RMP/EIS does not address two issues often described in land use plans. These two issues, rangeland management and wilderness, have been previously resolved on the Arizona Strip in separate EISs. Rangeland management was considered in the Vermillion Grazing EIS (1979) and Shivwits Grazing EIS (1980). Decisions following the Shivwits and Vermillion Grazing EISs have been adopted as management direction for livestock grazing in this RMP/EIS (Appendices 1, 2, and 3). Two draft EISs were prepared on wilderness suitability in 1981 and 1982. In the Arizona Wilderness Act of 1984, Congress designated 265,600 acres of BLM-administered lands as wilderness, completing this effort.

Wilderness management plans (WMPs) have been approved for six of the areas. Currently there is a draft WMP for one area, and a cooperative plan is being drafted for the remaining area by the Forest Service and BLM.

This RMP/EIS replaces land use planning decisions in the Shivwits and Vermillion Management Framework Plans (MFPs). These decisions have guided BLM's management of public lands on the Arizona Strip District for the past seven and thirteen years respectively. The MFP decisions that have not been completed are being carried forward and are incorporated into this RMP. Completed or obsolete decisions will be dropped. Chapter II summarizes MFP decisions to be carried forward in management guidance common to all alternatives.

DESCRIPTION OF THE PLANNING AREA

The district includes BLM-administered lands in Arizona north and west of the Colorado River to the Utah state line and west to the Nevada state line (Map S-1). Communities within the area are Page, Fredonia, Colorado City, and Littlefield/Beaver Dam. Communities in adjoining states are Kanab and St. George in Utah and Mesquite in Nevada. Land holdings within the district consist mostly of large blocks of public lands administered by BLM, with several blocks of state land near communities scattered throughout the district. Private lands are concentrated mostly around the communities of Fredonia, Colorado City, and Littlefield/Beaver Dam. One other large block of mostly uninhabited private land is at Mt. Trumbull, about 60 miles south of St. George (Map S-2). Table I-1 shows land surface administration on the Arizona Strip.

A vast, remote, and interesting area, the district consists of broad plateaus, rolling valleys, impressive cliffs, and rugged country. This landscape is punctuated by mountain ranges, volcanic cones, and to the west, a drop-off of nearly 5,000 feet from the Grand Wash Cliffs to the Mohave Desert below.

The majority of the district is located within the Colorado Plateau physiographic province. Only that portion of the district lying west of the lower Grand Wash Cliffs is within the Basin and Range province.

TABLE I-1
Land Surface Administration, Arizona Strip

Ownership	Acres
Federal (north of the Colorado River)	
BLM-Administered Public Lands	2,868,000
North Kaibab Ranger District	655,000
Glen Canyon National Recreation Area	40,000
Lake Mead National Recreation Area	300,000
Grand Canyon National Park	900,000
Pipe Springs National Monument	40
Kaibab-Paiute Indian Reservation	121,000
State Ownership	334,000
Private Ownership	153,000
Total Acres	5,371,040

NOTE: All acreages rounded to the nearest 1,000 acres except Pipe Springs National Monument.

Source: Arizona Strip District files

Geological features of the area were largely carved by the major tributaries of the Colorado River, i.e., the Paria River, Kanab Creek, and Virgin River. The plateau province is rough, ranging in elevation from 3,000 feet along the lower Hurricane Valley and south St. George Basin to nearly 6,000 feet on the Paria Plateau. West of the lower Grand Wash Cliffs, typical basin and range type topography dominates, with irregular, elongated valleys bordered by ridges and escarpments. Elevations in this area range from less than 2,000 feet near lower Grand Wash to 6,000 feet along the Grand Wash Cliffs. The two highest points on the district are Mt. Bangs in the Virgin Mountains and Mt. Trumbull, both reaching over 8,000 feet.

Much of the public lands consist of large acreages of sagebrush and pinyon-juniper. However, in the Mt. Trumbull, Black Rock, and Parashant areas are 15,000 acres of ponderosa pine forests. Other common vegetation types include grasslands, salt desert shrub, mountain brush, with prominent stands of blackbrush, creosote bush, and Joshua trees in the low elevations.

The public lands involved have important wildlife, minerals, archaeology, wilderness, and scenic, recreation, and grazing values. A number of areas in remote locations adjacent to the Grand Canyon National Park, Lake Mead and Glen Canyon National Recreation Areas, Kaibab National Forest, and designated wilderness areas have exceptional natural features which provide unique recreational experiences in backcountry settings.

The limited and difficult access, the remoteness of much of the district, and the low human population are a large part of its appeal and uniqueness. Except for a highway which crosses the deep Colorado River gorge at the extreme east end of the district, ground vehicle access from the south does not exist due to the Grand Canyon. Three highways cross the northern boundary of the district. No paved roads extend into the interior, but over 5,262 miles of unpaved roads and truck trails crisscross the area.

A wide variety of multiple uses occur and public uses have increased steadily in recent years. The resources and associated public uses and industries are important to local communities, regional economies, and the nation. The most prominent public uses are ranching, which occurs throughout the area; uranium exploration and development, which are concentrated in the Vermillion Resource Area; and dispersed recreation.

PLANNING PROCESS OVERVIEW

The BLM resource management planning process consists of nine steps described below and illustrated in Figure I-1.

Step 1: Issue Identification

This planning step is designed to identify major problems, concerns or opportunities associated with the management of public land in the RMP area. Issues are identified by the public, the BLM, and other governmental entities. The planning process is focused on resolving the identified issues.

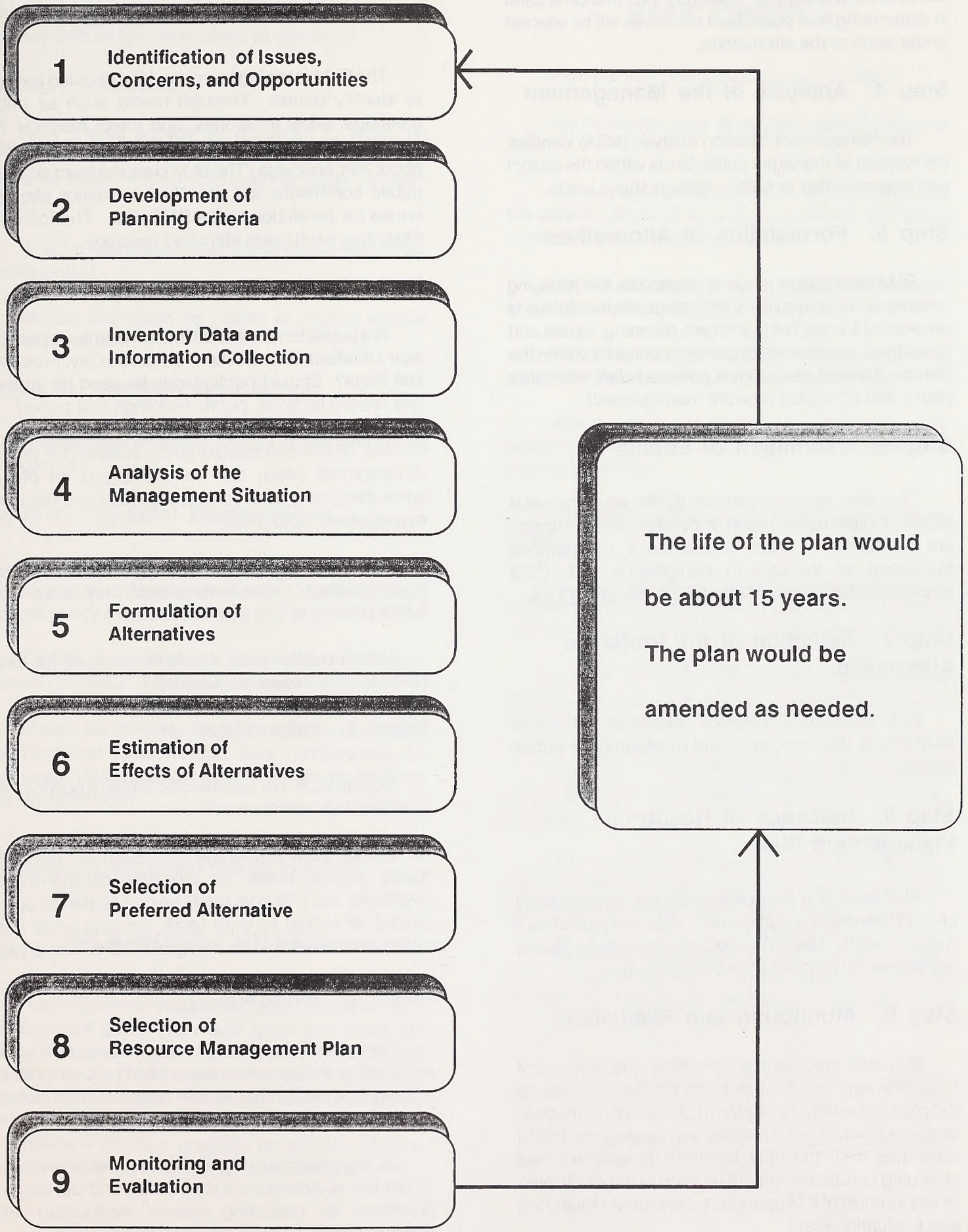
Step 2: Planning Criteria

Planning criteria include policies, laws, regulations, and guidelines for resolving issues, developing alternatives, and choosing a proposed plan.

Step 3: Inventory and Data Collection

Certain biological, physical, social or economic information needed to resolve the planning issues are

FIGURE I-1. Steps in the Resource Management Planning Process



collected and analyzed. Inventory information is used in determining how public land resources will be affected under each of the alternatives.

Step 4: Analysis of the Management

The Management Situation Analysis (MSA) identifies the ways BLM manages public lands within the district and opportunities to better manage these lands.

Step 5: Formulation of Alternatives

BLM formulates a range of alternatives for managing resources within the district. A range of alternatives is developed to resolve significant planning issues and to address specific management concerns within the district. Alternatives include a preferred plan, alternative plans, and no action (current management).

Step 6: Estimation of Effects

This step involves estimating the environmental effects of implementing each of the alternatives. Impacts are estimated in order to provide a comparative evaluation of impacts in compliance with CEQ regulations for implementing NEPA (40 CFR 1500).

Step 7: Selection of the Preferred Alternative

BLM identifies a preferred alternative. The draft RMP/EIS is then prepared and distributed for public review.

Step 8: Selection of Resource Management Plan

BLM selects a proposed resource management plan after reviewing public comments and publishes it with a final EIS. Decisions become final after a 30-day appeal period following the EIS publication.

Step 9: Monitoring and Evaluation

This step involves the collection and analysis of long-term resource condition and trend data to ensure the plan is meeting its objective of resolving identified issues and achieving other desired results. Monitoring continues from the time the RMP is adopted until changing conditions require revision of the whole plan or any portion of it (Appendix 4; Resource Monitoring and Evaluation Plan).

PLANNING ISSUES

The BLM planning team used the scoping process to identify issues. Through media such as public meetings, news advisories, and direct mailings, the public was given the opportunity to inform the BLM about their concerns. The BLM planning team analyzed public comments and identified six major planning issues for resolution in the RMP/EIS. The following describes each issue identified for study.

Issue 1: Lands

Are public lands needed for community expansion near Littlefield, Beaver Dam, Colorado City, Fredonia, and Page? Should public lands be used for airports and related facilities, public buildings and parks?

Are BLM-administered lands suitable for private development which can be exchanged for private lands that could meet long-term public and resource management objectives?

Where should right-of-way corridors be retained or established? How wide should they be to meet future powerline and pipeline needs?

Which public lands should be retained for long-term multiple use management?

Issue 2: Recreation

Should BLM manage specific areas of public lands to retain their remoteness?

Should BLM encourage recreation by improving roads, signing areas, or providing campgrounds, overlooks, etc.? Should areas be designated as open, limited, or closed to OHV use? Are any lands near communities suitable for designated OHV use areas?

Issue 3: Minerals

How can BLM manage and encourage mineral exploration and development and still preserve other resource values? What are the cumulative impacts of mineral exploration and mining?

Do any areas have significant renewable resource values that require special stipulations and can only be protected by restricting mineral exploration and development?

Do any areas have high mineral resource potential which should remain open to exploration and development with as few restrictions as possible?

Issue 4: Access

How should access be managed to meet the objectives of resource management? Should new roads be built? How should existing roads be maintained?

Which areas should be acquired for access across public lands?

Should any roads be closed to protect special resource values?

Issue 5: Cultural Resources

What actions should BLM take to protect cultural resources?

Issue 6: Special Designations

Which lands should be designated as ACECs to protect important resource values or to protect human life and safety from natural hazards?

Should certain areas be designated as RCAs or special recreation management areas (SRMAs)?

Should the existing Virgin River Scenic Area and the Vermillion Cliffs Natural Area designations be continued, designated as ACECs, or eliminated from any designations?

Do the Paria and Virgin Rivers meet the eligibility criteria for wild and scenic river designation?

PLANNING CRITERIA

Planning criteria established legal parameters and management goals that would guide and direct the RMP. These criteria were developed by BLM and reviewed by the public to assure the planning process focused on the issues. The criteria were used at four stages of the planning process: resource inventory, management situation analysis, formulation of alternatives, and selection of preferred alternative.

BASIC CRITERIA

Basic planning criteria came from FLPMA:

- follow the principles of multiple use and sustained yield

- use a systematic interdisciplinary approach, fully considering physical, biological, economic and social aspects of public land management

- identify, designate, protect and specially manage areas of critical environmental concern

- consider relative significance of public land products, services, and use to local economies

- rely on the inventory of the public lands, their resources, and other values, to the extent such information is available

- consider present and potential uses of public lands

- consider impact of federally-approved actions on adjacent or nearby non-federal lands and on private land surface over federally-owned subsurface minerals

- consider the relative scarcity of the values involved and alternative means and sites for realization of those values

- weigh long-term benefits and consequences of proposed actions against short-term benefits and consequences

- comply with applicable pollution control laws, including state and federal air, water, noise, and other pollution standards and plans

- coordinate, to the extent consistent with public laws, resource planning and management programs of other federal departments and agencies, states and local governments, and Indian tribes

- provide the public with early notices and frequent opportunities to participate in the preparation of plans

- manage the public lands to prevent unnecessary or undue degradation of the lands.

SPECIFIC CRITERIA FOR ISSUE IDENTIFICATION

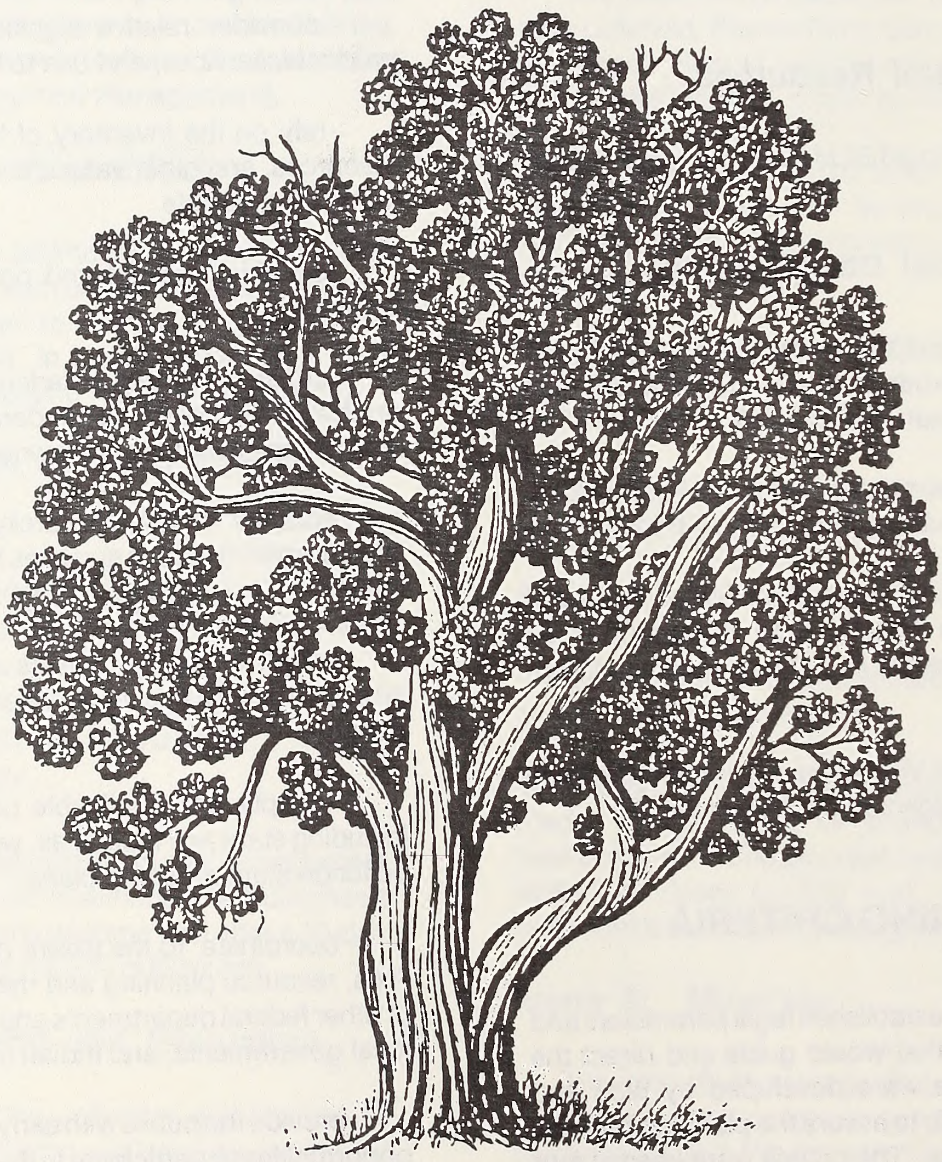
Changes in current resource management practices were considered for any of the following conditions:

- management of one resource significantly constrains or curtails use of another resource

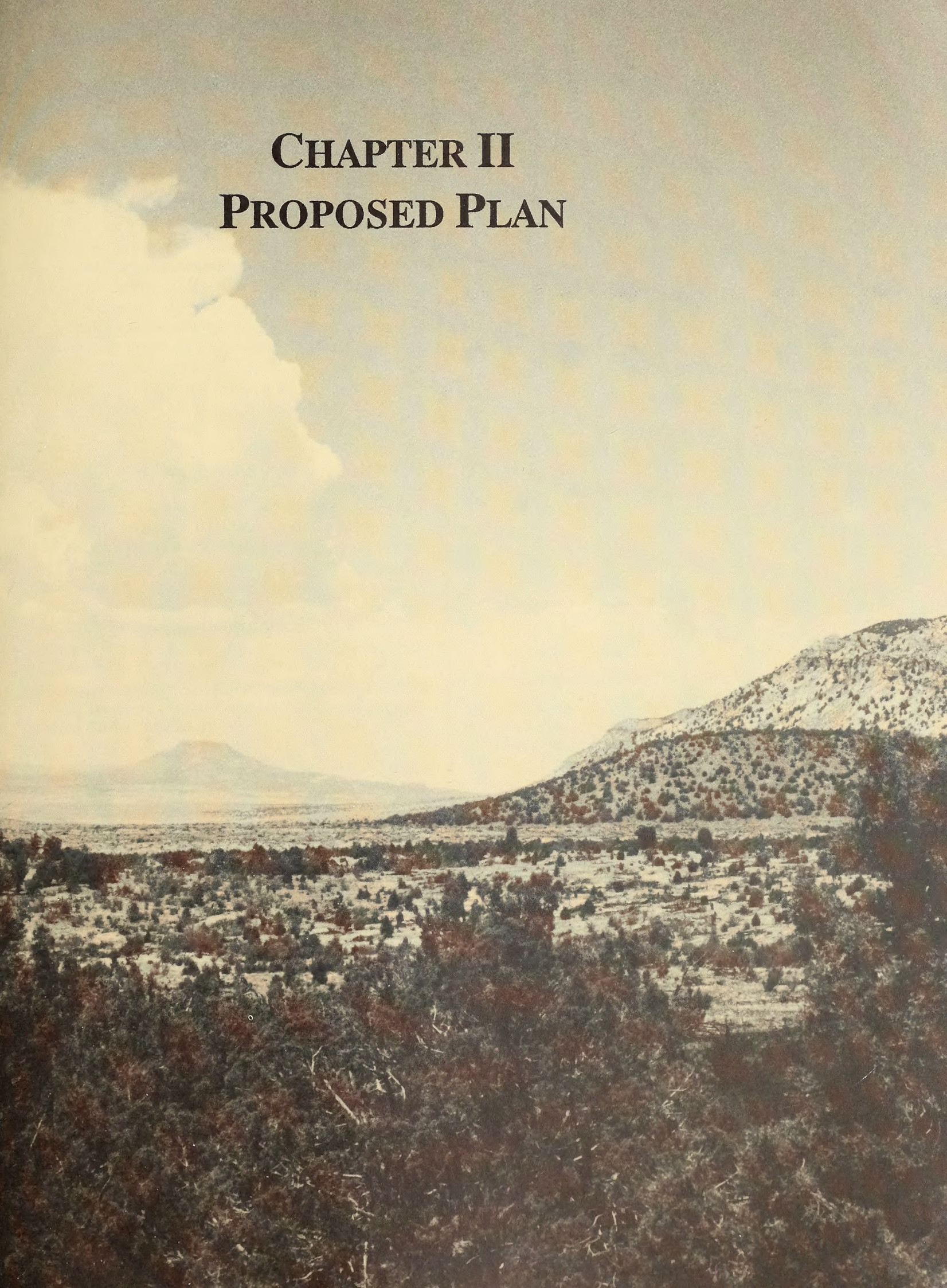
- existing land use allocations conflict with agency resource management policies or guidance

- existing resource management practices conflict with management plans, policies, and guidance of another federal or state surface management agency

- documented public controversy regarding management of a specific resource value indicates a management concern.



Chapter II
Proposed Plan



CHAPTER II
PROPOSED RESOURCE MANAGEMENT PLAN

INTRODUCTION

The proposed resource management plan (RMP) described in this chapter was developed by a BLM interdisciplinary planning team. It is based on the preferred alternative in the draft plan, but has been modified due to public comment and new data. The proposed RMP represents a complete plan to guide future management of the public land in the Arizona Strip District. The proposed RMP is summarized in tables similar to Tables II-1 and II-2 in the draft.

Appendix 29 shows the process used to develop the proposed RMP. The plan descriptions are made up of two major elements--existing management that would continue and new RMP decisions. The number and type of new RMP decisions were identified by reviewing the current management situation, public comments, BLM manual requirements and management direction. Making these determinations was based on districtwide objectives and specific guidance developed for lands with unique/sensitive resource values and those that are common and less fragile. The objectives and guidance were developed by reviewing the various resource values and programs on the district. The size and shape of the unique/sensitive areas were modified to reflect different public concerns expressed during the public comment period for the draft RMP.

The inter-disciplinary planning team reviewed information received through the public scoping process, comments received on the draft RMP/EIS, and other available information. Areas with special resource values were evaluated for possible designation as areas of critical environmental concern (ACEC) designation (see Appendix 6), establishment of special recreation management areas (SRMAs) or resource conservation areas (RCAs).

Most of the land use actions in this RMP would be implemented after the State Director signs the RMP record of decision (ROD). The plan decisions become final with the issuance of the ROD. Implemented actions include designation of ACECs, utility corridor locations and widths, communication sites, special management areas, and OHV designations. Specific actions for ACECs, RCAs, and OHV designations will be implemented as site-specific management plans are developed and appropriate clearances made.

Some actions cannot be implemented immediately. For example, mineral withdrawal revocations must be approved by the Secretary of the Interior. Thus, actions such as these may be recommended in this RMP but would not become valid until approved by the appropriate authority. However, BLM intends to pursue all actions recommended in this proposed RMP and included in the record of decision.

Other actions in the RMP require the completion of further detailed planning and environmental compliance before on-the-ground work can begin. For example, watershed activity plans, OHV designations, designated road closure plans, and forest and woodland management plans would need to be prepared to meet RMP objectives. Other RMP decisions would not be implemented until existing activity plans were revised to comply with RMP objectives and decisions. This detailed planning would occur as personnel and funds are made available.

PLAN OBJECTIVES AND GUIDELINES

Public lands administered by the Arizona Strip District are rich in wildlife, archaeological, wilderness, scenic, recreation, mineral, and forage values. Resources include a major uranium industry, rapidly increasing recreation activities, and numerous ranching operations. These resources and associated public uses are important to local communities, regional economies, and the nation. Moreover, some of these public lands are adjacent to Grand Canyon National Park, Glen Canyon and Lake Mead National Recreation Areas, Kaibab National Forest and Kaibab Indian Reservation. Other public lands have unique values and special management needs which require evaluation as possible ACECs.

The overall goal of the district is to provide quality multiple use management of public lands. The RMP alternative selected for implementation within the district will help accomplish this goal.

General objectives have been established to ensure that the RMP will provide quality management direction that responds to the issues and meets the specific resource needs. In addition, a series of guidelines have been defined to achieve these objectives.

DISTRICTWIDE OBJECTIVES

The following districtwide objectives have been established to provide comprehensive guidance for all public land uses and management activities within the district:

- manage public lands and resources under the concept of multiple use to attain the optimum combination of uses

- manage public lands to balance use and conserve renewable resources to provide sustained productivity

- manage public lands in a manner that responds to the nation's need for domestic sources of energy, minerals, and livestock products from the public lands and the importance of these industries to local and regional economies

- provide special management emphasis in areas with unique features or special management needs

- maintain cooperative relations and programs with public land users, interest groups and other government agencies

- manage for diverse recreation opportunities for the increasing number of visitors to public lands

- manage livestock grazing to maintain productive rangelands which meet forage, watershed, and wildlife needs

- encourage orderly development of mineral resources while protecting, to the extent practicable, non-mineral resources and values

- maintain and enhance wildlife habitat to ensure healthy populations and natural diversity

- protect and, as appropriate, enhance public land resources through the suppression and management of wildfires and the use of prescribed fire

- manage floodplains to minimize damage to various resources and land uses

- enforce the laws and regulations governing protection of public lands and visitors

- determine ecological site conditions and potentials; identify the desirable plant communities attainable on sites for multiple-use management; and manage rangeland vegetation so that it becomes as productive as feasible for multiple-use values

- manage acquired lands according to final RMP decisions in specific areas

- maintain the open space, scenic character and remoteness of public lands

- adjust land tenure as necessary to improve federal land management effectiveness, improve resource values, and provide lands for public and private uses where determined to be in the highest and best use now and in the future

- maintain existing access where needed to meet public and administrative needs

- manage public land resources in consultation with adjacent federal or state management agencies to avoid unnecessary adverse impacts

- manage wild burros at appropriate management levels to achieve a thriving natural ecological balance

- allow new access only where needed and in the best public interest overall. Close and rehabilitate newly constructed access roads upon termination of specific needs

- rehabilitate all surface disturbances to the extent practicable upon termination of approved uses to protect soil, vegetation, water and other environmental values to blend into surrounding terrain and settings

- manage surface-disturbing activities to prevent undue or unnecessary degradation to the environment

- use special stipulations where they are applicable and prudent to minimize long-term impacts to the visual quality. (Special stipulations would be developed during the National Environmental Policy Act (NEPA) process to ensure that objectives and guidelines are met. Special stipulations that could be included are found in Appendix 5.)

- acquire state and private lands that will further improve public land management (through exchange, sale or donation) where there is a willing party

- maintain/enhance existing visual quality for all areas.

MANAGEMENT GUIDELINES

In addition to districtwide objectives, guidelines have been developed to provide consistent management across public lands within the district which require different management intensity and emphases. These were formulated due to the existence of areas with special resource concerns, sensitivities, or characteristics. The following summarizes the management guidelines for the two broad land areas defined as areas A and B. Locations of these areas are identified on Map II-1. These areas and associated guidelines were used to guide development of the resource management alternatives. They are not intended to be special management areas or designations, but were used to help ensure consistent management in specific geographic areas.

Area A

Most of the district consists of lands in area A. These lands contain a wide variety of resources and values that require continued multiple-use management. Most of the lands do not contain unusual characteristics and are not subject to unusual demands requiring special management attention.

Management guidelines for these areas would remain similar to current management practices which are considered adequate. Existing laws, regulations, policies and procedures would be followed. The following management guidelines would apply to area A:

- designate OHV use as open or limited to existing roads and trails

- issue commercial, non-commercial, negotiated sales, and free-use permits as appropriate for woodland products and mineral materials

- provide for primitive motorized and primitive non-motorized recreation

- transfer public lands for community expansion, primarily through exchange.

Area B

Area B includes land identified by the public and BLM as having unique resource values and special management needs. These lands have characteristics that include important scenic values, exceptional natural features and fragile physical features. In these fragile areas, disturbances would be very difficult to reclaim and permanent scars on the landscape occur. With few exceptions, public lands in area B are more remote than those in area A. These lands are generally not developed and presently do not receive a great deal of public use.

Management guidelines for public lands in area B would be focused on the maintenance/enhancement of various resource values while allowing for multiple use. BLM would manage authorized uses and prepare management prescriptions to protect remoteness, natural settings or other unique resource values. The following management guidelines would apply to area B:

- close and rehabilitate roads where no obvious public or administrative need exists

- designate OHV use as limited to designated roads and trails or closed

- implement special coordinated resource management plans to protect the fragile character and unique resource values of specific areas

- permit the removal of woodland products only when it would enhance other resource values of the area

- retain land in federal ownership unless specifically required by law

- provide for primitive motorized and primitive non-motorized recreation

- accommodate mineral material disposal, provided visual resource management (VRM) Class II guidelines are met.

THE RANGE OF ALTERNATIVES

The plan objectives and guidelines have directed the decisions of the RMP and influenced the proposed management in specific geographic areas. Even though the B areas are not management designations or management units, the guidelines helped ensure proposed managed actions in specific areas are complementary. Map II-2 shows the B guideline areas (including changes since the draft) and the management prescriptions designed to ensure that these guidelines are met. Many overlapping decisions have been made to meet the objectives and guidelines of the plan. For example, in some areas the B lands are designated as an ACEC, closed to OHVs,

managed under VRM Class II guidelines which emphasizes preservation of natural scenic values, contain special restrictions for oil and gas leasing, and are closed to green wood cutting. However, in other areas B land may have only a few management prescriptions such as OHVs limited to designated roads and trails and managed under VRM Class II guidelines. Of the 611,000 acres identified for management under the B guidelines, 402,210 acres are included in a specific management designation, i.e., ACEC or RCA. The remainder of the B land is managed through the various resource program decisions, i.e., OHV management, VRM management, woodland harvest, etc. In either case, proposed management decisions are designed to meet the objective and guidelines as they relate to specific areas.

The decisions in the plan are summarized by resource program in Table II-1 and identified on maps at the end of this chapter. References to guideline areas are not made since they are not designations and were only used to guide the development of the proposed RMP. Management prescriptions for ACECs and RCAs are identified/summarized in Table II-2; more detailed information is contained in the appendices.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED

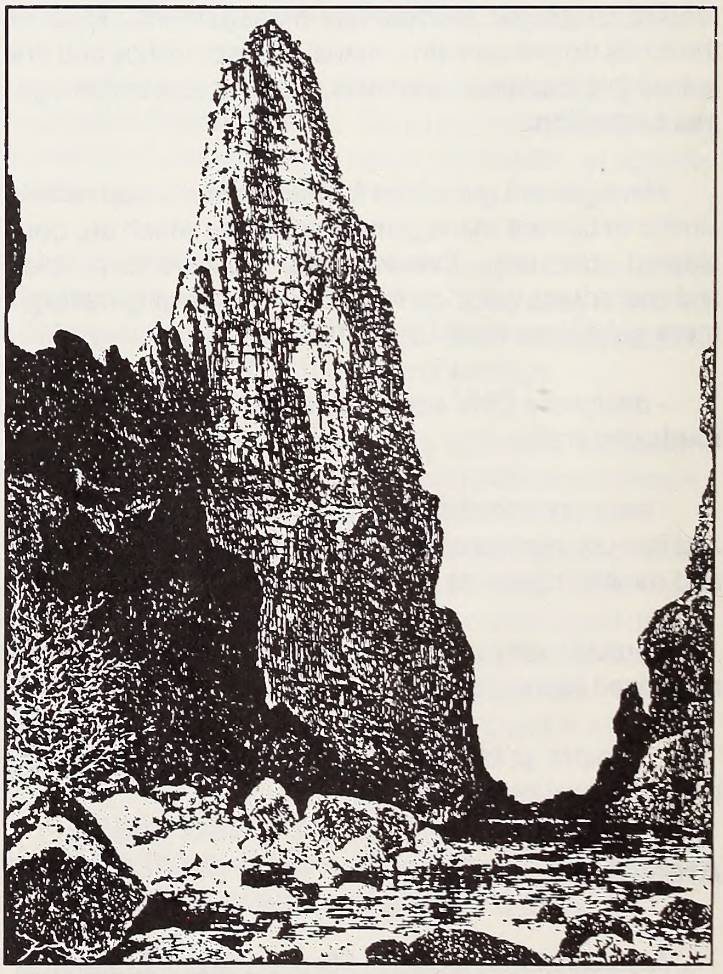
A fifth alternative in addition to the four studied in the draft RMP/EIS was considered, but not chosen for detailed study. During scoping an alternative involving large numbers of areas withdrawn from mineral entry was proposed. The withdrawal areas covered much of the southern half of the district. The RMP team and management considered this proposed alternative, but decided not to analyze it further for several reasons. The reasons are summarized as follows:

- During scoping, there were some voiced complaints about other BLM plans which they felt presented unrealistic alternatives, with a development alternative, a preservation alternative and an alternative in the middle. The people requested that all alternatives be reasonable. Alternative 3 considers withdrawals but does not consider large withdrawn areas because the action could not be implemented. The four alternatives presented in the draft represent a spread of options that the Bureau believe are viable and reasonable and could be implemented.

- A major purpose of a withdrawal is to protect unique resource values by preventing mineral exploration and development. A withdrawal of public land would be subject to valid existing rights, including valid mining claims, in effect on the date of withdrawal. Much of the land requested for withdrawal is presently claimed; therefore, a withdrawal would not provide the protection desired and would have little effect.

- While mineral exploration and development have potential impacts on wildlife, natural beauty, and recreation, environmental analysis and past experience have shown impacts to be minor and temporary. The need for large areas to be withdrawn is not justified because the impacts would not be significant and can be mitigated by BLM requirements in accordance with 43 CFR 3809.

- Many of the areas recommended for withdrawal were considered for wilderness designation by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). Congress intended that lands unsuitable for wilderness designation be returned to multiple use management, including mineral exploration and development.



THE PROPOSED RMP

A diverse combination of balanced uses in the proposed RMP would be accommodated and managed in accordance with Federal Land Policy and Management Act (FLPMA). The RMP provides a responsive approach to the planning issues, resolution of conflicts, the need for more focused management in areas with special values and the management objectives of adjacent federal lands.

Current multiple uses are reflected in the proposed plan's objectives and decisions. Management programs include diverse kinds of recreation, livestock grazing, mineral exploration and production, wildlife development and utilization, watershed, wild burros, woodland products, designated wilderness, rights-of-ways and community expansion needs.

BLM would manage for the full array of multiple uses. Some areas (VRM Classes I and II) would be managed to protect the natural backcountry resource setting, retain the remote character of the areas, and preserve the irretrievable and unique resource values; other areas would be identified to promote more traditional uses such as grazing, realty actions, minerals, and wildlife.

The following describes how the plan addresses the six planning issues:

Lands Issue

Small scattered tracts of public land (7,405 acres) near the communities of Mesquite, Littlefield, Colorado City, and Fredonia have been identified for potential ownership transfer. These tracts meet sale criteria as described in Sec. 203(a) of FLPMA. These same lands plus an additional 17,783 acres would be for various public purposes and for exchange to meet long-term public needs. Disposals that involve habitat of species protected by the Endangered Species Act must result in a net effect that is positive or neutral and does not jeopardize species recovery. The BLM would actively seek opportunities to acquire desert tortoise habitat where it would improve the likelihood of recovery. The lands covered by this RMP are only available for disposal as identified through exchange, sale or Recreation and Public Purposes Act. No disposals are allowed through entry under the agricultural land laws (Desert Land Entry, Indian allotment, and Carey Act).

Lands in the Ferry Swale area would not be considered for an airport unless all reasonable alternative sites in Arizona, Utah and the Navajo Nation have been analyzed. The Ferry Swale site would have to be proven the most suitable both from an aviation and environmental aspect.

A 1-mile-wide right-of-way corridor (except in the Ferry Swale area which is 1/2-mile-wide, and the Beaver Dam Slopes where rights-of-way would be considered on a case-by-case basis) containing the Navajo-McCullough powerline and a corridor extending from Rosy Canyon to Lime Kiln Canyon would be designated to meet major transmission needs. Seegmiller Mountain and Point-of-the-Rocks would be established as communication sites and physical facilities on Black Rock Mountain and Mt. Logan would not be expanded.

Recreation Issue

An objective of the plan is to preserve the open space and backcountry character of the area. Approximately 611,000 acres of land are identified as having unique or special values (i.e., naturalness and remoteness) where special protective measures are proposed. Dispersed unregulated recreation is proposed for most of the district, with the exception of the Virgin River Canyon and a few small areas. Off-highway vehicles would be limited to existing roads and trails on 1,764,000 acres, permitted on designated roads and trails on 690,400 acres, and closed on 358,600 acres. Procedures would be initiated to designate 1,400 acres open in a small area near Fredonia, Arizona.

Minerals Issue

The majority of the district would continue to be open to mineral exploration and development. No new withdrawals are proposed and those withdrawals which are no longer needed would be revoked. In order to assure that the use and development of resources on the public lands, including the exploration and development of mineral resources, are managed in a manner which assures minimal impacts to unique renewable resource values, certain reclamation and operating requirements would be imposed on all operations for which approval is required from the Bureau. The requirements are included in Appendix 5 and would be used throughout the district as appropriate. Those locatable mineral exploration or development activities which exceed casual use in ACECs or involve the use of motorized vehicles in areas closed to such use would require the prior submission and approval of a plan of operation. In order to protect sensitive wildlife species and scenic resources, seasonal and no-surface occupancy stipulations would be attached to certain oil and gas leases where the need for such stipulations exist.

Access Issue

The existing 5,402 miles of roads within the district should meet most future needs. In areas with special remoteness value, no new permanent roads would be allowed. Roads not needed for resource management or to protect resource values would be closed, limiting OHVs to designated roads and trails on 690,400 acres.

Special Designation Issue

Special designations are proposed to help protect special status plants and animals, cultural values, and recreational values. Ten ACECs are proposed, totaling 59,210 acres. The entire length of the Virgin River in Arizona has been determined eligible for wild and scenic river study. The Paria River has been determined suitable for wild and scenic river designation. The Parashant, Mt. Trumbull/Mt. Logan areas and the Canyons and Plateaus of the Paria area are recommended as resource conservation areas (RCAs) so their multiple use values would be emphasized and interpreted for public enjoyment.

Cultural Resources Issue

Six areas with significant cultural values have been included in ACEC designations to help ensure proper management and protection. Cultural properties within these six areas will be managed for public education, enjoyment, and scientific study. Other areas would continue to be managed under current laws and policy. Increased surveillance and law enforcement personnel will address unauthorized actions.

MONITORING AND EVALUATING THE PROPOSED RMP

The effect on the environment and planning issues from implementing the proposed RMP would be monitored and evaluated according to the schedule and methods shown in Appendix 4. Other environmental values or issues, not now considered, would be incorporated into the plan through the amendment process and formally monitored.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Land Resources

MANAGEMENT GUIDANCE:

Land Ownership Adjustments: Identification of parcels of land in this plan makes it available for further consideration, but does not commit the BLM to its ultimate transfer. It's unlikely that the full amount of land identified would be transferred during the life of the plan. All land identified as suitable for sale in this RMP Environmental Impact Statement (EIS) meets the criteria set forth in Sec. 203(a) of the Federal Land Policy and Management Act of 1976 (FLPMA). It states, in part, that "...such tract because of its location or other characteristics is difficult and uneconomical to manage as part of the public land and is not suitable for management by another federal department or agency." Exchange, sale, or Recreation and Public Purpose Act (R&PP) actions serve important public objectives including, but not limited to, expansion of communities and economic development, which may outweigh other public objectives and values. All transfers will be made at fair market value, except conveyance under the R&PP Act.

Land can be sold or leased under the R&PP Act to qualified applicants, such as local government, at reduced prices according to BLM Manual 2740. To ensure public purpose development of public land slated for R&PP transfer, the BLM may require that land be first leased for a period prior to issuing a patent. Lands may also be considered for sale or grant under other various acts including the Airport and Airway Improvement Act of September 3, 1982.

Land exchanges will be given priority before sales are considered. Land ownership adjustments are based on the merits and resource values contained in specific proposals and all exchanges will be in the public interest. Private exchanges will be consummated to acquire lands with special public values and to benefit federal management programs. Lands to be acquired will have an inventory to ensure that hazardous materials sites are not exchanged.

Land ownership adjustments can also be accomplished through state exchange.

On lands not identified for disposal, BLM would retain the federal subsurface mineral estate and acquire through exchange the non-federal subsurface estate on existing split-estate public lands or on lands proposed for acquisition.

BLM's ability to sell or exchange land through the RMP/EIS may be constrained by existing withdrawals which segregate against disposal. BLM cannot consider any type of land ownership adjustment on withdrawn land until the segregation has been lifted. FLPMA Sec. 204(1) requires that all withdrawals affecting public land be administratively reviewed by 1991. Land that becomes unencumbered through the withdrawal review process then comes under the guidance of decisions made in this RMP/EIS.

In addition, any land identified for exchange, sale or R&PP actions will be evaluated for the presence of threatened or endangered species, floodplain/flood hazards, riparian areas, water sources, prime and unique farmland, and significant cultural resources before deciding whether or not to transfer the land. Presence of any one of these values may preclude an action.

Land Use Authorizations: Land use authorizations (rights-of-way, leases, permits, easements) would continue to be issued on a case-by-case basis and in accordance with decisions established in this RMP/EIS and site-specific environmental review. Maximum use of existing rights-of-way, including joint use whenever possible, would be encouraged. Any rights-of-way in wilderness that expire will be evaluated and if still needed will be processed under 43 CFR 2920.

Utility Corridors: Utilities are directed to route their major systems through designated corridors. This prevents or reduces the proliferation of major utility systems across public land and reduces adverse environmental impacts to sensitive resources.

Communication Sites: Communication site applications are considered on a case merit basis in accordance with the RMP. Communication site plans are required prior to approval of application on all designated sites. It's BLM's policy to consolidate these sites as much as possible.

Recreation and Public Purposes Act (R&PP): Under the R&PP Act, BLM has the authority to lease or sell public land to governmental or non-profit entities for public parks, building sites, correction centers or for other public purposes. R&PP leases or sales would be issued in accordance with the decisions set forth in this RMP and are processed under the requirements of the National Environmental Policy Act (NEPA).

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Land Resources (continued)

MANAGEMENT GUIDANCE (continued):

Landfills: BLM has authorized four landfills: Littlefield, Colorado City, Fredonia and Page. BLM will continue to work with local county and state governments, on a case-by-case basis, closing old facilities and expanding or relocating new ones. Environmental protection and public safety will be paramount. Current policies favor direct sales.

Access and Transportation Rights-of-Way (ATROW): Section 205 of FLPMA, Chapter 43 of the Code of Federal Regulations (CFR) Group 2100, and BLM Manual 2100 provide regulations and guidance on ATROW.

Easements: Acquisition of easements across private lands are negotiated where needed to accomplish public land resource management programs. Easements are purchased at fair market value. They can either provide access for the general public or for administrative purposes only. A partial list of easement acquisition needs are depicted in Appendix 24.

Airports: Airport and Airway Improvement Act of September 3, 1982. Act of May 24, 1928. 49 USC App. 211-213. 43 CFR 2640-2911. BLM has authority to make land available for lease or grant for use as airports. The Federal Aviation Administration (FAA) provides technical information on airport design and climate. BLM and FAA require close coordination and share in the development and preparation of all environmental documents. Currently there are six airports or airstrips on the district: Tuweap Valley, Whitmore, Cliff Dwellers, Marble Canyon Lodge, Colorado City, and Mesquite.

EXISTING PLANS AND DECISIONS:

- Designation of the Navajo-McCullough right-of-way utility route as a corridor.

- Terminate Public Land Order 3701 (withdrawal for scientific studies of hybrid oak), 154 acres; terminate Boulder Canyon withdrawal (Bureau of Reclamation), 4,709 acres. Revoke 17,000 acres of Virgin River scenic withdrawal which overlap wilderness areas. The following withdrawals would continue on the Arizona Strip District: Public Water Reserves (1,040 acres), Grand Canyon Game Preserve (29,255 acres), Virgin River Scenic Withdrawal (portions 5,000 acres), Vermillion Cliffs Natural Area (portions 70,437 acres), Tanglefoot Forest Service Administrative Site (40 acres), and wilderness (265,600 acres). Specific tracts may be withdrawn in the Vermillion Cliffs Natural Area in relation to the private lands from Cliff Dwellers to Marble Canyon.

- Acquire state and/or private lands by exchange. Exchanges will be the primary method of ownership adjustment.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Ownership adjustments	Make 7,405 acres available for exchange, sale or R&PP. Exchanges would be first priority. These same lands plus an additional 17,783 acres would be available for exchange (Appendix 7). All remaining lands would be retained in federal ownership (Map II-3). Retain all desert tortoise habitat in Category I or II in federal ownership. The lands covered by this RMP are only available for disposal as identified through exchange, sale or the R&PP Act. No disposals are allowed through entry under the agricultural land laws (Desert Land Entry, Indian allotment, and Carey Act). Airport and Airway Improvement Act of September 3, 1982.
- Acquisitions	Acquire 161,800 acres of state land. Most of these lands are to be acquired by exchange for public lands located in Apache and Navajo counties in the Phoenix District. Acquire 21,600 acres of private land as shown on Map II-3. Acquire subsurface estate where BLM manages surface. Acquire lands with riparian and other high resource values when opportunities occur. Seek opportunities to acquire desert tortoise habitat (Appendix 8 and Map II-4). Lands acquired through exchange would be open to operation of all public land laws as restrained in this RMP, unless specifically modified by the opening order.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Land Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
- Airports	Administer existing airstrips. Make lands available for an airport grant in the Colorado City area in coordination with city officials, the Arizona Department of Transportation and the Federal Aviation Administration. The City of Page, Arizona, anticipates the need for expanded airport facilities within the next decade; however, it is not included in the proposed RMP. BLM would continue to work with the city and county officials, the FAA, and other agencies in considering and evaluating possible sites. Ferry Swale would not be considered until all reasonable sites located in Arizona, Utah and the Navajo Nation have been assessed. If Ferry Swale or some other location is documented by FAA, the City of Page, BLM and other government agencies as the best airport site, we will take the necessary steps to process the application or assist as needed.
- Communication sites	Do not expand physical facilities on Black Rock Mountain and Mt. Logan communication sites; however, existing rights-of-way, not yet constructed, would be grandfathered and could be built. Establish Seegmiller Mountain area and Point-of-the-Rocks as communication sites. Consider other sites which may be requested on a case-by-case basis. No communication sites in Moccasin Mountains.
- Withdrawals	Conduct review of the Federal Energy Regulatory Commission (FERC) withdrawal in Ferry Swale. Consider converting powerline authorizations to rights-of-way. Terminate the following portion of the Vermillion Cliffs Natural Area Withdrawal: T. 39 N., R. 7 E., Sec. 7, Lot 7 (approx. 44 acres). The withdrawal revocations previously proposed would continue to be pursued (see Appendix 31).
- Rights-of-Way corridors (width)	Designate the existing Navajo-McCullough right-of-way corridor 1-mile-wide, except ½-mile-wide in Ferry Swale area and confine the width of the right-of-way (R/W) across the Beaver Dam Slope to the Nevada state line to only that width occupied by the existing powerline and a second yet unbuilt R/W. Drop the description of the existing corridor. Future proposals for powerlines across the Beaver Dam Slope would be considered on a case-by-case basis addressing impacts to desert tortoise. Designate a 1-mile right-of-way planning corridor across Arizona Strip via Lime Kiln/Rosy Canyon route. Rosy Canyon width is confined to the valley bottom, approximately ½ mile wide. Stipulations necessary to protect habitat conditions for tortoise will be included (Map II-4). Where feasible, place linear rights-of-way underground along existing roads in the following areas: Paria Plateau, Parashant, Uinkarets, and House Rock Valley (temporary rights-of-way could be excluded from underground placement). Do not authorize rights-of-ways in the following areas: Grama and Kanab Canyons, Moccasin Mountain and Marble Canyon ACEC. Evaluate individual rights-of-way on a case-by-case basis with NEPA analysis.
- Leases	Continue leasing of 12 acres of agriculture land (Hafen, Hemmeter and Hughes). Continue leasing of 13 additional acres above Beaver Dam Wash (Biasi) if compensation for tortoise can be included north of I-15.
- Agricultural entry	Close all public lands to agricultural land laws including Desert Entry, Carey Act and Indian Allotments.
- Landfills	Work with local, county and state government on a case-by-case basis to close old facilities and expand or relocate new ones. Environmental protection and public safety will be paramount.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Mineral Resources

MANAGEMENT GUIDANCE:

Mineral exploration and development is encouraged on public land in keeping with the Bureau's multiple-use concept. Overall guidance on the management of mineral resources appears in the Mining and Minerals Policy Act of 1970, Sec. 102(a)(12) of FLPMA, National Materials and Minerals Policy, Research and Development Act of 1980, and BLM's Mineral Resources Policy of May 29, 1984.

Leasable Minerals: The Mineral Leasing Act of 1920, Geothermal Steam Act of 1970, and 43 CFR 3100-3500 provide the legal and regulatory framework for the issuance and management of mineral leases. These regulations apply where public interest exists for the development of oil, gas, geothermal, coal and non-energy leasable mineral resources. Stipulations are attached to leases and permits in order to ensure protection of non-mineral resources that are susceptible to impacts resulting from the exploration and development of leasable mineral resources.

Locatable Minerals: Exploration and development of locatable mineral resources are provided for by the Mining Law of 1872. 43 CFR 3809 provides for mineral exploration and development while assuring that activities are conducted in a manner that prevents unnecessary or undue degradation, provides protection of non-mineral resources, and provides for reclamation of disturbed areas.

Salable Minerals: The Materials Sale Act of 1947 and 43 CFR 3600 provide for the disposal and regulation of mineral materials. Disposal is administered on a case-by-case basis. Salable minerals are sold at fair market values. Free use permits are issued to federal and state agencies, local communities, and non-profit groups as the need arises.

EXISTING PLANS AND DECISIONS:

- Allow entire unit to remain open to mineral leasing, location, and sale except where restricted by wilderness designation, withdrawals, or specific areas identified in this plan.

- Provide the communities in or near the area with sand and gravel needed for development in a timely and orderly manner consistent with environmental considerations.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Leasing categories (O&G)	2,790,800 acres open to lease subject to standard lease terms and conditions; 269,900 acres open to lease subject to seasonal restrictions to protect important seasonal habitat for peregrine falcon and bighorn sheep; 157,600 acres open to lease subject to the no surface occupancy stipulations to protect important visual resources (Map II-5 and Appendix 9).
- Mining law	2,570,200 acres would be open to mineral entry. Reclamation stipulations would be added to exploration and development plans directed toward maintaining naturalness and unique features and/or remoteness on the Arizona Strip (Appendix 5). These stipulations would be applied to site-specific proposals. Plans of operations would be required in ACECs and areas closed to OHV.
- Material disposal	Material disposal in VRM Class II areas would not be allowed if reasonable alternative sources are available. Some special designation areas are closed to mineral material disposals as described in Table II-2. Designate E½NW¼SW¼ (20 acres) T. 40 N., R. 15 W., for a potential community material pit to serve the Littlefield area with small quantity material sales.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Cultural Resources

MANAGEMENT GUIDANCE:

Cultural resource protection and management on public lands are covered by an array of laws and regulations. Two of the most important laws are the National Historic Preservation Act (NHPA) of 1966, as amended, and the Archaeological Resources Protection Act of 1979 (ARPA), as amended. Under NHPA, potential impacts to National Register and National Register-eligible properties are identified and measures to avoid or mitigate those impacts are developed in consultation with the Arizona State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation. This act also requires the Secretary of the Interior to develop plans to determine the nature and extent of archaeological resources and schedule land surveys in areas that likely contain the most scientifically valuable archaeological resources. ARPA prohibits the attempting or actual excavation, removal, damage or trafficking of archaeological resources from public land by unauthorized persons. This act requires the BLM to foster and improve communication, cooperation and encourage information among private individuals, other governmental agencies and professional archaeologists in consultation with the SHPO. Since 1985, BLM has operated under terms of a general compliance programmatic memorandum of agreement with the State of Arizona, which guides inventory and data recovery procedures for sites on all public land, and a specific memorandum of agreement addressing the protection of cultural resources in BLM-state land exchanges.

Cultural resource management programs include participation of both professional and amateur archaeologists. The Bureau currently has cooperative agreements for research and excavation. Volunteer agreements with members of American Rock Art Research Association (ARARA), the Dixie Chapter of the Utah Statewide Archaeological Society (USAS), the Arizona Archaeological Society (AAS), and other individuals have increased cultural resource inventories and encourage growth of cultural programs.

Inventory, evaluation, and proposed mitigation to cultural resources rests with BLM. It is policy that surface-disturbing activity on public lands be reviewed by a cultural resource specialist. Cultural reviews identify results of previous inventories and evaluate the probability of cultural resource occurrence in the project area. A cultural resource inventory is then conducted. Should cultural properties be found as a result of the inventory, they would be evaluated using the "Standards and Guidelines for Evaluation" 36 CFR 800.4(c)(i). Should it be determined that the cultural resource values cannot be avoided by the proposed activity, the effect to eligible cultural resource values would be evaluated using 36 CFR 800.9, and a program of mitigation would be developed through consultation between the BLM, the State Historic Preservation Officer and the Advisory Council in accordance with the National Historic Preservation Act of 1966 and 36 CFR 800. Through this process, all cultural resource values of National Register eligibility would be protected or impacts to them mitigated.

Cultural resource management objectives within the district are to protect the scientific information potential, enhance the public use values of sites or to manage them, when applicable, for conservation. Cultural resource project plans (CRPPs) will be developed for specific sites or areas having special significance or values. The guidelines for management under each objective are found in Appendix 10.

EXISTING PLANS AND DECISIONS:

- Priority and important cultural resource areas are patrolled by the Arizona Strip District ranger. Preliminary patrol plans for nine priority areas already exist. A cooperative agreement with Civil Air Patrol and an Intergovernmental Agreement supporting the use of the Arizona Site Steward Program has enhanced monitoring of cultural resources within the district.

- The Paria Plateau Patrol Plan provides guidance and coordination for protecting cultural resources.

- Little Black Mountain Cultural Resource Project Plan (CRPP) provides direction and plans for interpretation of the area for public values.

- The Shivwits Resource Area Patrol Plan provides guidance and priorities for protective field surveillance of cultural sites.

- Paria Canyon Cultural Resource Management Plan (CRMP) provides direction for management of cultural properties in the area.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Cultural Resources (continued)	
CHANGES IN MANAGEMENT:	
Change Agent	**Proposed Plan**
- Designations	Designate 227,000 acres on the Paria Plateau as an RCA. Designate 9,800 acres on Lost Spring Mountain; 5,500 acres on Moonshine Ridge; 2,400 acres at Johnson Spring; 260 acres at Witch Pool; 550 acres at Nampaweap; and 200 acres at Little Black Mountain as ACECs to preserve their cultural values (Map II-6). (Note: Lost Spring Mountain, Moonshine Ridge and Johnson Spring ACECs also contain the endangered Pediocactus sileri. The purpose of these designations is to focus planning and management attention to priority areas. The management actions that would be taken for each ACEC and RCA are described in Table II-2.
- Management direction	Initiate Class II inventory and develop CRMPs for areas designated. Classify and manage cultural resources in the RMP area for their information potential, conservation and public values. See Appendix 13 for a complete description of management objectives. Manage most sites for their information potential to be used for scientific research and management studies. Manage approximately 35 sites located in each of the ACECs and from selected geographic regions for conservation. These sites have overriding scientific importance and are preserved for future research. Manage Little Black Mountain, West Bench Pueblo, Colorado City site, Uinkaret Pueblo, Paiute Cave, Nampaweap, Witch Pool, Honeymoon Trail, Temple Trail and Dominguez & Escalante Trail for public values. These sites would be targeted for public involvement in research, interpretation, and tours.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Watershed (Soil, Water, Air) Resources

MANAGEMENT GUIDANCE:

Several laws provide authority for management of soil, water and air activities on public land.

FLPMA of 1976 requires that public lands be managed in a manner that protects scientific, environmental, air and atmospheric, and water resource values. It also requires land use plans to be in compliance with applicable pollution control laws, including state and federal air, water or other pollution standards.

The laws that FLMPA requires compliance with are the Soil Conservation and Domestic Allotment Act of 1935; The Watershed Protection and Flood Control Act of 1954; the Colorado River Basin Salinity Control Act of 1974; Wild and Scenic Rivers Act of 1968; the Federal Pollution Control Act with Amendments of 1972; Water Quality Act of 1987; and the Safe Drinking Water Act of 1977. The Clean Air Act of 1970 governs air quality. BLM Manual 7000 and several executive orders provide field guidance in management of soil, water, and air activities.

Watershed: Watershed conditions and soil salinity problems have been managed primarily through three separate systems: allotment management plans (AMPs), environmental assessments, and watershed activity plans.

1. The management and development of public lands through grazing AMPs and vegetation monitoring. Currently 70 AMPs have been implemented. AMPs establish grazing systems and vegetation standards to improve runoff/erosion rates. Manage vegetation cover towards ecological stability and sound long-term protective soil cover using mechanical, chemical, biological or fire as tools for accomplishment.

2. The environmental assessment (EA) review process helps assure that all surface-disturbing proposals are evaluated and, where appropriate, mitigated to maintain or enhance watershed conditions.

3. Watershed activity plans are written to assess areas where moderate to critical erosion conditions are prevalent and more attention is needed than what is provided through the AMP process. Two watershed activity plans currently exist: Fort Pierce and Upper Lang's Run. All watershed areas have been evaluated and put into one of four categories as described in Table III-11, Map II-7 and Appendix 11. The objectives for each category are stated below:

   a. Category I - These areas are in satisfactory condition and have a low vulnerability to accelerated erosion. The objective is to maintain current land use and vegetative cover (808,000 acres).

   b. Category II - These areas are in satisfactory condition and overall erosion is slight but the areas are susceptible to accelerated erosion. The objective is to maintain or enhance vegetation cover and to monitor the area to identify the onset of localized erosional problems on fragile or saline soils. All surface-disturbance proposals will be evaluated for their impacts to salt loading in localized drainages (1,226,000 acres).

   c. Category III - These areas are not in satisfactory condition, have critical erosion problems, and have no reasonable potential for improvement. There are only very few localized areas within the district. The objective is to not allow these areas to expand by developing special management plans for protection.

   d. Category IV - These areas are not in satisfactory condition, have moderate to severe erosion problems, but do have potential for improvement. The objective is to improve vegetative ground cover through grazing management or vegetative treatments including fire. Develop and/or maintain activity plans for these areas as a priority. Evaluate and mitigate impacts to active water sources as a priority (1,188,000 acres).

Floodplain Management: Executive Order 11988 directs federal agencies to "avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development whenever there is a practicable alternative" (Floodplain Management Guidelines, 43 CFR 6030, 1978). It is Bureau policy to retain and/or protect base (100-year) floodplains.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Watershed (Soil, Water, Air) Resources (continued)

MANAGEMENT GUIDANCE (Continued):

Water Resources: The water resource program is divided into the following sections: Water Inventory, Water Rights and Water Quality.

1. Water Inventory - Our policy is to complete and maintain an inventory of all water sources on public lands administered by BLM and to document and store this data in the Bureau's Water Data Management System. The district has nearly completed the inventory and is in the process of incorporating the data into the data base. Our objective is to complete the data base and keep it up-to-date and accurate, giving priority to instream flow for the Virgin River and obtaining flow data for various springs identified in the wilderness management plans. Riparian areas have been inventoried only for general condition as they relate to the water source inventory.

2. Water Rights - Our policy is to file water rights on all water sources in accordance with State of Arizona water laws. BLM will file, as appropriate, for recreational use, wildlife (including fish), livestock, administrative uses, and instream flows.

3. Water Quality - Our water quality baseline data is limited (Chapter III). One of our objectives is to establish a good baseline water quality data base using the USGS STORET system giving priority to riparian areas, recreational, wilderness and human use water sources. To ensure that all waters on public land meet or exceed established federal and state water quality standards for specific uses and to mitigate activities to prevent water quality degradation. Chemical water analysis is done on wells, streams and springs for baseline resource information. Generally, BLM manages non-point sources of pollution, as addressed in Section 319 of Water Quality Act of 1987 (P.L. 100-4). The Arizona Department of Environmental Quality, in partnership with BLM, is the designated agency for assessing, managing and certifying non-point source pollution control program on public lands in Arizona. These agencies assess non-point sources of pollution and prepare water quality management plans described as Best Management Practices (BMPs). BMPs are coordinated with BLM management plans. The Arizona Department of Environmental Quality reports water quality status to the EPA annually. BLM inventories and watershed activity plans are coordinated with the State of Arizona. Impacts to water quality are prevented or reduced through the application of specific mitigation measures identified in project planning and NEPA review.

Air Resources: Impacts to air quality resulting from activities on public lands are prevented or reduced through mitigation brought forward in NEPA review of proposed projects. Typically, activities on public lands which might affect air quality are addressed by Article 4 (R9-3) of the Arizona Rules and Regulations. Prescribed burning, road construction, construction of mineral tailings piles and dust emissions from vehicles passing over unsurfaced roads are all specifically addressed in the regulations.

EXISTING PLANS AND DECISIONS:

Watershed: Continue to implement, maintain and monitor existing watershed activity plans: Fort Pierce Community and Upper Lang's Run. Continue to develop, monitor and implement watershed plans that improve watershed conditions.

Water Resources: Improve water quality, water yield and reduce erosion around springs. Conduct an instream flow study of the Virgin River to support instream flow applications. Inventory and protect water resources including acquisition of water and instream flow rights.

Air Resources: Manage to prevent degradation of Class I federal air quality standards in national parks. Maintain Class II air quality standards and State air quality standards on public lands. Manage smoke on prescribed burns through smoke management procedures.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Watershed (Soil, Water, Air) Resources (continued)	
CHANGES IN MANAGEMENT:	
Change Agent	**Proposed Plan**
WATERSHED - Designations	Designate lands in the Fort Pierce area as an ACEC and Mt. Trumbull and Parashant as RCAs to improve watershed conditions. (See Map II-6 and Table II-2.)
- Management direction	Continue implementation of the watershed plan for Upper Lang's Run and maintain Fort Pierce Wash watershed projects. Coordinate watershed and riparian objectives into applicable AMPs with emphasis on areas of moderate to severe erosion. Develop and implement watershed activity plans for the following areas in accordance with shown priority. 1. Fort Pierce Wash, 2. Wolf Hole Valley, 3. Lower Langs Run, 4. Johnson Run, 5. Hobble Canyon, 6. Lower Hurricane Valley, 7. Upper Bull Rush Wash. Reclamation stipulations (Appendix 5) would be followed for all surface-disturbing activities. Complete ecological site inventories to determine site potentials and present ecological conditions. Establish desired plant community objectives for various areas and include in AMPs, HMPs and watershed plans. Prescribe management or improvement practices to achieve these objectives.
WATER RESOURCES - Management direction	Improve and protect quality and condition of water resources. Increase inventory on riparian management which includes studying water quality, stream bank conditions, channel dynamics, geomorphic relationships, seasonal flow fluctuations, etc.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Special Status Species

MANAGEMENT GUIDANCE:

The Endangered Species Act of 1973 (ESA), as amended, is the authority to conserve endangered or threatened species on public lands. Section 4(f) of the ESA directs the Secretary of the Interior to develop and implement recovery plans for the conservation and survival of endangered species. Section 7(a)(2) of the ESA states, "Each federal agency shall, in consultation with and with the assistance of the Secretary, ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined...to be critical...". Section 7(a)(1) of the ESA states, "All other federal agencies shall, ...utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species...".

The district is involved in an active program to benefit endangered species and to ensure that no activities funded, authorized or carried out by BLM jeopardize the continued existence of any listed species or their essential habitat. A concentrated effort is focused on studies and habitat management programs for the desert tortoise which inhabits large acreages of Mohave Desert in the western portion of the district. A cooperative long-term inventory of peregrine falcons is another major ongoing effort. Inventories for the presence of other species are also planned. The district is working with other agencies and the California condor recovery team to evaluate the possibility of establishing this endangered bird into this region. Any actions authorized, funded or carried out by BLM which may affect proposed or candidate species are reviewed in cooperation with Fish and Wildlife Service (FWS). State-listed animal species are managed in cooperation with AGFD under provisions of the Sikes Act of 1974 as amended).

Bureau policy for special status species is contained in BLM Manual Section 6840. BLM shall carry out management consistent with multiple use for conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened or endangered. Our policy is to collect systematically gathered data on candidate species to determine whether there exists a need to list the species. Special status species are listed in Appendices 12 and 13.

It is policy that any surface-disturbing activity on public lands receive a special status species review by a qualified specialist. The review is to verify the results of previous inventories and the probability of special status species in the project area. The USFWS provides information on federally-listed and candidate species. If we determine that special status species have a probability for occurrence in the project area, an evaluation would be made as to the impact on the species. The Bureau's intent is to avoid any adverse impacts. If the proposed activity may adversely affect a threatened or endangered species, the USFWS would be consulted. In compliance with the Endangered Species Act and Bureau policy, proposals which would adversely affect listed species would not be authorized, funded or conducted.

Potential impacts to special status species are analyzed in an environmental review by BLM for each project and protection measures may be stipulated in the record of decision in the environmental assessment and/or the biological opinion prepared by FWS. Special status species areas are patrolled by the Arizona Strip District ranger to monitor special status species.

EXISTING PLANS AND DECISIONS:

Since the completion of the MFPs, two habitat management plans (HMPs) have been completed in response to the recovery plans written for Siler pincushion and Brady pincushion cactus. These plans were coordinated with the USFWS, Arizona Game and Fish Department (AGFD), Arizona Commission of Agriculture and Horticulture, and The Arizona Nature Conservancy. The plans are being implemented.

Management of special status animals is specifically guided by recovery plans and the Virgin River-Pakoon Basin HMP and generally by the six HMPs (Appendices 14 and 15). The HMPs for special status species and wildlife are monitored and evaluated on a periodic basis to determine if the objectives are being met. Based on the evaluation, HMPs are modified/revised to meet changing situations or needs. The applicable HMPs also address management of several other sensitive and listed species, including the threatened desert tortoise. Guidance is also provided in the BLM's Rangewide Plan for Management of the Desert Tortoise on the Public Lands and the draft Arizona Desert Tortoise Implementation Strategy.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Special Status Species (continued)

EXISTING PLANS AND DECISIONS (continued):

The BLM objective for the management of the woundfin minnow and the Virgin River chub is to improve the habitat and population levels to a point the species no longer need listing.

The BLM objectives for the Virgin River spinedace are to maintain habitat conditions to support viable populations such that the species need not be listed.

Continued existing MFP decisions are as follows:

- Inventory potential raptor habitat.
- Restrict Bureau-permitted activities within known/occupied nesting areas of endangered or threatened raptors
- Protect desert tortoise habitat from destructive actions.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Designations Plants	Designate 10,700 acres of Brady pincushion cactus habitat and 4,200 acres of Siler pincushion cactus habitat in Johnson Spring, Lost Spring Mountain and Moonshine Ridge ACECs. Siler cactus habitat occurs in association with fragile soils in the Fort Pierce ACEC.) (Map II-6.)
Animals	Designate 20,800 acres as Beaver Dam desert tortoise ACEC and 8,100 acres as Virgin River ACEC (Map II-6). Intensify management of sensitive and endangered species within the areas as described in Table II-2 consistent with recovery needs, Desert Tortoise Rangewide Plan (1988), the draft Arizona Desert Tortoise Implementation Strategy, and the Endangered Species Act. Designate and manage desert tortoise habitat as follows: 37,300 acres in Category I; 56,350 acres in Category II; 295,300 acres in Category III (Map II-4 and Appendix 16). Category designations are based on best available information and would be corrected as new data becomes available.
- Management direction	Activities that could occur within one mile of an active peregrine eyrie, or "historic" or "superior" nesting habitat (Map II-8; Ellis 1979), between March 1 and August 1 (USFWS, 1984), may not be allowed if it's determined by the BLM that the peregrine would be adversely affected. The one mile buffer indicates the point at which a thorough impact evaluation, considering topographic and other factors, will begin. Activities which could adversely affect the desert tortoise during their active season within the Beaver Dam ACEC may be limited to the period between October 15 to March 15. Support and assist with transplants of special status species.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Riparian Areas

MANAGEMENT GUIDANCE:

The authority for riparian area management comes through several laws: Taylor Grazing Act (TGA) of 1934, FLPMA of 1976, PRIA of 1978, Emergency Wildlands Resources Act of 1986, and Executive Orders 11988 and 11990 dealing with floodplains and wetlands. The Bureau's Riparian Management Policy (January 22, 1987) and Arizona's Riparian Area Management Policy (July 1, 1988) specify the Bureau's riparian habitat management policy.

Our policy is that all ongoing or proposed uses of the public lands would be managed to ensure protection of riparian areas. Every activity associated with the use or disturbance of these unique ecological zones will receive protective management and/or mitigation.

Maintain, restore, or improve riparian areas to achieve a healthy and productive ecological condition for maximum long-term benefits. This can be accomplished using fire, mechanical, chemical or biological means.

Management direction for all alternatives:

1. Identify riparian areas and assign priorities for management;

2. Continue inventory of riparian areas to determine present condition and potential;

3. Implement management of riparian areas and their resources to maintain, improve, or restore riparian ecosystems, and eliminate or mitigate conflicts. Ensure support by all affected resource management programs;

4. Monitor important characteristics to assess significant changes and trends in condition;

5. Retain significant riparian areas in public ownership and acquire significant new riparian areas where possible to ensure the integrity of public riparian ecosystems and their dependent resources;

6. Coordinate with other federal and state agencies and interested user groups to ensure the development of top-quality management practices;

7. Explore research opportunities in cooperation with university or federal researchers to improve riparian management.

EXISTING PLANS AND DECISIONS:

Important riparian areas have been addressed in AMPs and HMPs. Changes in grazing use and systems and exclusion of livestock by fencing have been implemented. Through the normal AMP/HMP monitoring and evaluation process, revisions are being made to implement the riparian area policy. Previous MFP decisions to improve and maintain aquatic and riparian habitat through intensive management and fencing where necessary will continue.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Designations	Designate Virgin River bottomlands from Utah state line to the Nevada state line as a riparian ACEC. Designate the Beaver Dam/Virgin River confluence area as a riparian demonstration area and manage the 80 acres under a riparian demonstration plan. (Table II-2 outlines management prescriptions for ACECs.)

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Forest/Woodland Resources

MANAGEMENT GUIDANCE:

The forest lands in the RMP area are managed as set forth in FLPMA under the principle of multiple-use and sustained yield without permanent impairment of the productivity of the land and the quality of the environment. The amended Material Disposal Act of 1947 provides authority to dispose of forest products. BLM Manuals 1601-1608 and 5000 provide guidance in forest management. Surface-disturbing activities would be subject to the NEPA process.

- Maintain healthy, viable and biologically diverse forest ecosystems that will meet the long-term needs of wildlife, recreation, livestock grazing, watershed protection and other associated resource uses.
- Protect the forest from catastrophic fires while, as appropriate, managing prescribed burns or naturally occurring fires within established prescriptions to reduce fuel buildup, maintain healthy species composition and benefit wildlife habitat, watershed cover and livestock forage.
- Protect ponderosa pine stands from serious insect and disease infestations.
- Maintain appropriate old growth and dead standing ponderosa pine and a healthy understory of vegetation (oak and other species) for wildlife habitat and natural aesthetics.
- In forest management activities, ensure protection of natural aesthetics, recreation, special status species, and cultural resource values.
- Improve the visual appearance of the edges of the old chainings in the Parashant area. Create an irregular edge effect for both wildlife and visual improvement.
- Utilize personal and commercial woodland activities to complement other resource program goals and objectives.

EXISTING PLANS AND DECISIONS:

The MFPs provide for harvest of woodland products (e.g., fuelwood, fence posts) by sale to private and commercial operators at fair-market value.

Existing HMPs provide guidance for wildlife needs and objectives related to forest and woodland management activities.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
WOODLANDS - Designations	Designate personal/commercial green and dead-and-down woodcutting areas as shown on Map II-9. Personal Christmas tree cutting is open everywhere except wilderness areas and ACECs.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Forest/Woodland Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
- Management direction	Green, or dead-and-down woodcutting areas would be signed and permittees directed to areas managed in accordance with woodland management plans. Woodcutting for camping is allowed, except no chainsaws in wilderness areas. Commercial use will be in specified areas and managed under the multiple use/sustained yield concept. Up to 500 Christmas trees could be sold annually in the Shivwits personal use area on a first-come basis based on demands and sustained yield. Up to 1,000 trees could be sold annually in the Shivwits commercial use area for either commercial or personal use on a first-come basis. Inventories would be conducted to update information on woodland production and sustained yield. Districtwide limits will be established for personal use post cutting. Above this limit, permits will be considered commercial and subject to approval, mitigation and location requirements. Both resource areas contain certain restrictions regarding approved post cutting areas.
FORESTS - Designations	Designate ponderosa pine forests on Uinkaret, Parashant, and Black Rock Mountains located outside the wilderness as Management Category C. These are areas of "forest management for the enhancement of other uses". (See Map II-10 and Appendix 30 for definition of management categories.)
- Management direction	Implement an active, carefully designed, long-range program directed toward managing, maintaining and protecting ponderosa pine forest ecosystems located outside of the wilderness areas. Management direction would be to maintain healthy, viable and biologically diverse forest ecosystems that will meet the long-term needs of wildlife, recreation, livestock grazing, watershed and other resource uses. Commercial forestry or harvest are not objectives because of the importance of these forests and their associated resources to diverse multiple uses. Management programs may, however, include ecologically sound and carefully managed silvicultural practices that could make wood products available for public or commercial use. Possible silvicultural practices include: - Selective thinning necessary for the health, vigor, regeneration or biological diversity of the forest ecosystems or otherwise beneficial to resources. - Salvage harvest and rehabilitation of burned areas and disease and insect kill sites. Other management practices may include: - Disease and insect control - Reduction of fuels - Prescribed burns - Prescribed management of naturally occurring fires Specific management objectives, planned practices and associated guidance would be specified in plans to be developed for the Mt. Trumbull and Parashant RCAs. These plans would be developed with public participation, completion of NEPA compliance action, and clearance for special status species and cultural resources.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Grazing Management

MANAGEMENT GUIDANCE:

BLM's rangeland management program in the RMP area is managed under provisions of the Taylor Grazing Act of 1934 (TGA), the Federal Land Policy and Management Act (FLPMA), the Public Rangelands Improvement Act of 1978 (PRIA) and the Code of Federal Regulations Part 4100. These acts outline the following goals for grazing administration and rangeland management which are the goals of the Arizona Strip District.

- Administer livestock grazing on the public lands to balance use and sustain productivity and appropriately mesh livestock production and associated management practices with other multiple use needs and objectives.

- Manage, maintain, protect and improve rangeland resources within the framework of multiple-use needs and objectives so that they are productive for all rangeland values.

- Maintain close monitoring of the utilization, condition and trend of rangeland resources.

- Make sure that rangeland improvement projects provide multiple-use benefits, where appropriate.

Primary rangeland management/grazing administration program components are explained below:

Allotment Categorization: Allotments within the district have been categorized into one of three management categories based on Bureauwide criteria (see Appendix 3) focused on present range resource condition and management needs, rangeland potential, conflicts with other resource values and improvement opportunities. This categorization is an organized process for classifying allotments to direct management efforts and distribution of improvement funds where they are most needed and to achieve cost-effective improvement of rangeland conditions. The three categories are: "M"--Maintain, "I"--Improve and "C"--Custodial. The "M" category allotments are managed to maintain existing satisfactory conditions. The "I" category allotments are managed to improve unsatisfactory conditions. The "C" category allotments receive custodial management to prevent resource deterioration. Management efforts are focused on allotments where monitoring and evaluation indicate that grazing management actions are needed to improve the rangeland resources or to resolve serious resource-use conflicts. The allotments are recategorized as management needs or objectives are accomplished and conditions change. Appendix 1 shows the current and proposed management category by allotment.

Allotment Management Plans: AMPs, based on multiple-use resource objectives, have particular importance in rangeland management. They are the planning documents which consolidate key information on the long-term management objectives, decisions and actions for a given rangeland area. AMPs consider grazing management in relation to renewable resources--watershed, vegetation and wildlife--and other multiple use needs and objectives. AMPs also establish the seasons of use, the number of livestock to be grazed, grazing systems, utilization limits and planned range improvements. AMPs are periodically reviewed and revised to ensure that they are accomplishing specified objectives.

Monitoring: Comprehensive monitoring is a major focus to monitor rangeland resource condition, trend, utilization and actual grazing use to evaluate whether objectives are being met, ensure that utilization is proper and determine if change in management is necessary.

Condition and Trend: Studies are conducted in key areas in each pasture to determine ecological condition and trend. Key areas are representative sites of larger management units being monitored. Appendix 2 shows rangeland trend data.

Utilization: Vegetative utilization levels are measured using the grazed class method as a basis for evaluating and adjusting stocking rates.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Grazing Management (continued)

MANAGEMENT GUIDANCE:

Actual Use: Actual use records document the number of livestock that actually graze a pasture and the period of that use. In conjunction with utilization and trend data, the actual use information provides a sound basis for determining and confirming the proper livestock stocking rate.

Range Use Supervision: Allotments are visited periodically to maintain appropriate supervision of grazing use, ensure compliance with licensed use and grazing system, observe patterns of use and detect resource problems.

Rangeland Program Summary Document (RPSD): This status report is issued every 5 years to consolidate information on the results of monitoring and to keep interested publics informed. The RPSD provides the current status on AMP implementation, grazing use levels, grazing system compliance, ecological trend, expenditures of range improvement funds and areas of future management focus. The 1987 RPSD is available in the Arizona Strip District Office. The next RPSD will be issued in 1992.

Complete EAs on new AMPs or on major revisions and site-specific rangeland improvement projects.

EXISTING PLANS AND DECISIONS:

- Existing guidance calls for the management of rangelands in accordance with goals established by various laws and the Shivwits and Vermillion Grazing Environmental Impact Statements and the AMPs which specify grazing systems, management facilities and land treatments. By policy, AMPs are to be revised to reflect any needed changes as determined through monitoring and evaluations. Vegetative treatment projects are implemented where plant cover or soil productivity is being lost, to achieve a desired plant community, to improve habitat conditions for wildlife or to meet activity plan objectives. Practices used to accomplish this include mechanical treatments, herbicide applications, biological treatments, prescribed fire, reseeding and construction of water control structures. Use of pesticides are prescribed, as appropriate and necessary, to control insects such as grasshoppers, crickets, etc. Pest management would be in compliance with the Programmatic Vegetative Treatment on BLM-Administered Land EIS and the Cooperative Grasshopper Management Program.

- Manage rangelands in accordance with the goals, multiple use objectives, requirements and provisions of established laws, regulations and BLM policies.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Management direction	Except for the Parashant area and rangelands inhabited by the desert tortoise, which involve special management circumstances, continue current management objectives but amend existing AMPs as appropriate to be consistent with RMP decisions. Project proposals described in previous planning documents would be implemented, using the reclamation stipulations in Appendix 5. In areas inhabited by desert tortoise, conduct a biological evaluation of livestock grazing management activities. Develop AMPs on allotments involved where no AMP exists and revise existing AMPs where necessary to conform to the requirements of the BLM Rangewide Desert Tortoise Plan. Maintain a concentrated monitoring program to continue to evaluate livestock grazing-desert tortoise habitat interrelationships and vegetative conditions and trends. In the Parashant area (former Gubler-Frei allotment) grazing preference has been relinquished to BLM. Grazing management would continue as one of the multiple uses in accordance with a plan to be developed for a proposed RCA in the area. Grazing authorization would be at BLM's discretion to provide rest as needed on other allotments because of fire damage, vegetative treatments or to allow rest to establish AMP grazing systems.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Grazing Management (continued)	
CHANGES IN MANAGEMENT:	
Change Agent	**Proposed Plan**
- Management direction (continued)	Complete ecological site inventories to determine site potentials and current ecological conditions. Establish desired plant community objectives for various areas and include them in AMPs, HMPs and watershed management plans. Prescribe management or improvement practices to achieve these objectives. Continue to maintain a high priority on monitoring programs to ensure management, use and protection of the public rangelands within multiple use needs and objectives. Continue a systematic cycle of monitoring data evaluation on all allotments, involving a thorough review of consolidated utilization, condition, trend, actual use and precipitation data to determine whether objectives are being met or changed management is necessary. Continue to take assertive action to resolve grazing use problems or conflicts.
- Changes in kind of livestock	Change in the kinds of livestock actions from cattle to domestic sheep and/or goats would not be authorized within or adjacent to occupied bighorn sheep habitats unless monitoring studies and research indicate a disease transmission problem would not exist.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Wild, Free-Roaming Burros

MANAGEMENT GUIDANCE:

Public Law 92-195, December 15, 1971 (USC 1331-1340, as amended) made BLM responsible for the welfare and protection of unbranded and unclaimed burros found on public land at the time of passage. The Arizona Strip has no wild, free-roaming horses. The management of burros on public land requires their removal from adjacent private or state land when requested, the development of a herd management area plan, the maintenance of a herd inventory and the removal and disposal of excess animals to the public by adoption. Burros on public land are managed at the minimum level necessary to assure the herd's free-roaming character, health and self-sustaining ability while ensuring herd management plans are consistent with category goals, objectives and management of the desert tortoise.

The small wild burro herd in the Tassi area of the Arizona Strip is managed under the Tassi-Gold Butte Herd Management Area Plan (HMAP, Appendix 15), which sets optimum herd numbers in relation to their environment and other multiple-use values.

EXISTING PLANS AND DECISIONS:

- Maintain a healthy population of wild, free-roaming burros in ecological balance with rangeland resources (between 90 and 100 head).

- Remove excess burros when necessary; manage for a herd size of 90-100 animals.

CHANGES IN MANAGEMENT:

- None

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Wildlife Resources

MANAGEMENT GUIDANCE:

Wildlife is an important public land resource and it's development and utilization are established by law as principal uses of the district. Since BLM is responsible for habitat and the Arizona Game and Fish Department (AGFD) is responsible for management of wildlife species, close coordination and cooperation between the two agencies are essential.

Wildlife and wildlife habitat on public lands in the district are managed under the provisions of FLPMA of 1976, the Sikes Act of 1974, the Public Rangelands Improvement Act of 1978, the 1987 Master Memorandum of Understanding between BLM and the Arizona Game and Fish Commission, and guidance in the Bureau's Fish and Wildlife 2000-A Plan For the Future and various manuals. Specific management direction is contained in the Rangewide Plan for Managing Habitat of Desert Bighorn Sheep on Public Lands, Waterfowl Handbook and the Bureau's Raptor Habitat Management mandate. Guidance specifically pertaining to threatened or endangered species includes the Endangered Species Act of 1973 as amended, Bald Eagle Protection Act of 1940, the Desert Tortoise Rangewide Management Plan and the BLM manual section 6840 regarding special species management.

The following are major wildlife program components:

Habitat Management Plans (HMPs): The HMPs are planning documents prepared in cooperation with the AGFD which provide consolidated guidance on wildlife and wildlife habitat management objectives and planned projects. Six HMPs are in effect covering specific geographic areas within the district (Appendices 14 and 15). The HMPs are periodically evaluated to determine if management direction and actions are adequate and if planned objectives are being met. Based on monitoring data, changed policies and direction, the HMPs are updated and periodically revised jointly with the AGFD.

Habitat Management: A major focal point is to ensure that productive habitat is maintained for the diverse wildlife species inhabiting the public lands and that wildlife needs and considerations are incorporated into land use planning, environmental assessments and land management decisions.

Habitat Development and Improvement: An active program is in effect involving planning, construction and maintenance of habitat improvement projects covered in the HMPs. Diverse projects are involved ranging from water developments to prescribed burns and fence modifications.

Habitat and Wildlife Inventory: Inventories are conducted to obtain information required to effectively manage habitat and to incorporate habitat, wildlife and threatened and endangered species needs and considerations into land use planning, environmental decisions and diverse land management decisions.

Monitoring: A long-term monitoring effort is in effect to monitor habitat condition, trend and utilization. This includes monitoring to determine how management actions are affecting wildlife and habitat resources and whether objectives of the HMPs are being met.

Wildlife Restoration: Restoration of native wildlife into historic range by transplanting is recognized as a highly desirable practice and a central component of the district's wildlife program. The restoration program, a cooperative effort with the AGFD, has resulted in the reestablishment of desert bighorn sheep, antelope, turkey and the Kaibab squirrel.

Threatened and Endangered Species: Consistent with requirements of the Endangered Species Act, the district is involved in an active program to benefit endangered species and to ensure that no activities funded, authorized or carried out by BLM jeopardize the continued existence of any listed wildlife species or their essential habitat (see the special status species section for details).

Wildlife Habitat Studies: Studies to monitor habitat conditions for wildlife are an integral part of the monitoring program, including trend transects, exclosures and study plots. Such studies are recognized as being particularly important in desert tortoise habitat.

Specific management guidance:

Continue close working relationships with the AGFD to integrate habitat management and species management activities.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Wildlife Resources (continued)

MANAGEMENT GUIDANCE: (continued)

Manage wildlife habitat in accordance with HMP and resource objectives to achieve desired plant communities. Practices used to accomplish this include mechanical treatments, livestock grazing, herbicide applications, prescribed and natural fire, reseeding and water developments.

Interagency habitat monitoring studies which include long-term as well as short-term studies (i.e., vegetative trend, diversity, composition, vertical cover and utilization levels) will govern any need to adjust from original big game numbers as identified in activity plans. Population levels must be consistent with the carrying capacity of the habitat and other resource values.

Future management objectives should include improving mule deer habitat by increasing sufficient forage on summer ranges and nutritious browse on the winter range through vegetation conversion and management prescriptions.

The objectives for Merriam's turkey as listed in the Mt. Trumbull, Black Rock and Parashant HMPs are to maintain good ground cover for nesting and large trees for roosting.

Balance non-consumptive use of wildlife with consumptive uses by directing vegetation/habitat management towards maintaining an ecologically diverse plant community.

EXISTING PLANS AND DECISIONS:

See Clayhole, Paria-Kanab Creek, Mt. Trumbull, Black Rock, Parashant, and Virgin River-Pakoon Basin HMPs. These documents are on file in the Arizona Strip District office.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Management direction	Wildlife habitat would be managed under the HMP program, guidance documents, the Bureau wildlife policy, and the needs as determined through monitoring studies and HMP evaluations. Revise HMPs to meet changing management conditions. Proposed projects could continue to be constructed; however, they would be required to meet the reclamation standards identified in Appendix 5. Intensify HMP monitoring efforts, increase efforts to identify and correct limiting habitat factors, and emphasize project maintenance. Ensure wildlife management activities do not contribute to the proliferation of natural predators within desert tortoise habitat. Emphasize management of non-game species habitat and non-consumptive uses in writing of new activity plans and revision of existing activity plans. Complete ecological site inventories to determine site potentials and present ecological conditions. Establish desired plant community objectives for various areas and include in AMPs, HMPs and watershed plans. Prescribe management or improvement practices to achieve these objectives.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Wildlife Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
- Bighorn sheep numbers	Manage identified bighorn sheep habitat as outlined in the HMPs and the Bureau's Rangewide Plan for Desert Bighorn Sheep to achieve and maintain optimum numbers and distribution of bighorn populations in the Paria, Kanab Creek, Virgin Mountains and Grand Wash Cliffs. Cooperatively with the AGFD maintain monitoring of bighorn sheep and their habitats.
- Lambing activities	Activities which could adversely affect the lambing or rearing of newborn bighorn sheep along the lower Grand Wash Cliffs would not be permitted from December 1 through May 31. All other lambing areas are in designated wilderness.
- Antelope	Manage habitat to achieve and maintain viable populations in the Clayhole, Shivwits and House Rock Valley in accordance with HMP objectives. Initial target levels are 400 in Clayhole, 400 in Shivwits and 120 in House Rock Valley. Implement in cooperation with the AGFD studies to determine factors limiting antelope herds in the Clayhole area and actions that can be taken to facilitate restoration of antelope to the desired levels.
- Kaibab squirrel	Investigate suitability of transplanting Kaibab squirrels into ponderosa pine habitat at Black Rock and Parashant if studies reveal that they inhabited the area at any time.
- Mule Deer	Through interagency effort with Arizona Game and Fish Department, emphasize habitat monitoring/evaluation and population dynamics studies to determine the reasons for low deer populations and actions that might be cooperatively implemented to improve productivity. Target numbers will be reevaluated in HMP review and revisions.
- Designations	Manage the Parashant, Canyons and Plateaus of the Paria, and Mt. Trumbull areas as RCAs, recognizing wildlife as one of the important resources. (See Table II-2 for management prescriptions, and Map II-6.)

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Recreation Resources

MANAGEMENT GUIDANCE:

FLPMA established specific mandates for the inventory, planning, and management of off-highway-vehicles, recreational, scenic, and wilderness values of public lands. Other legislation of particular significance to management of recreational resources on public lands include the Land and Water Conservation Fund Act of 1964 (LWCFA), which provides the basis for fee collection at developed sites and funds for land acquisition; NEPA, which established national policy for protecting the environment, including natural, cultural, and historic aspects; the National Trail Systems Act of 1968, which established a process for designating national scenic, historic, and recreational trails; the National Wild and Scenic Rivers Act of 1968, which established a process for designating and managing nationally significant river segments; and the Wilderness Act of 1964, which provided criteria for inventorying, designating, and managing wilderness areas. The Arizona Strip District is responsible for managing eight designated wilderness areas. Recreation 2000-A Strategic Plan (1988) highlights specific areas where BLM intends to concentrate it's recreation management efforts, establishes priority and establishes recreation as an equal partner with other programs.

Recreation on the Arizona Strip, except for the developed campground in the Virgin River Gorge, is largely unregulated and dispersed. The most common recreation activities are backcountry vehicle exploring, hunting, camping, sightseeing, hiking and backpacking. Opportunities to do these activities in a remote, uncrowded and unregulated setting are important to those visiting the Strip. Camping is limited to 14 days at any one location across the district unless otherwise authorized.

An annual off-highway motorcycle race, a wagon trip, and two horse trips along historic trails are the organized recreational events now taking place within the district. Applicants apply for special recreation use permits that go through the NEPA process to determine if they are environmentally compatible with the management objectives for the area. These applications are handled on a case-by-case basis as they are received. Requests for additional recreation permits will be evaluated for their consistency with management goals and objectives and processed on a case-by-case basis.

Management direction and actions include: (1) accommodate current uses, protect cultural values, and complement wilderness management plans where appropriate; (2) provide visitor information; (3) use various methods to acquire visitor use data on an annual basis; (4) maintain system of traffic counters, monitor results monthly and field-verify results annually; (5) conduct compliance patrols by district ranger; and (6) on all proposed actions, consider visual impacts and protect scenic values by using mitigation measures where feasible, including alternative locations, camouflage, vegetation or topographic screening and other appropriate measures.

EXISTING PLANS AND DECISIONS:

- Improve and increase road signs and develop a sign inventory system.

- Implement actions designed to restore and or maintain natural conditions or appearance in all areas.

- Maintain primary access roads, particularly Quail Hill Road, on a year around basis.

- Interpret the natural history, historical and archaeological values in the Mt. Trumbull area.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Recreation Resources (continued)	
CHANGES IN MANAGEMENT:	
Change Agent	**Proposed Plan**
RECREATION (see Appendix 17 for Recreation Opportunity Spectrum (ROS) class definitions)	
- Management direction	Manage the majority of the Arizona Strip District for extensive recreation while maintaining its naturalness/remoteness. The exceptions to this are the Cedar Pockets campground and the Dominguez-Escalante interpretive site. Commercial recreation permits would be issued to the extent that their cumulative impacts are consistent with the overall objectives of this plan and in the public interest.
Parashant Area	
- Designations	Designate the Parashant as an RCA (Map II-6) since recreation is one of its important land uses.
- Objectives	Manage recreation in the area to provide opportunities in settings ranging from roaded natural (RN) to semi-primitive non-motorized (SPNM). (See ROS class definitions, Appendix 20.) Manage the area in coordination with the NPS Lake Mead NRA to ensure continued public use and enjoyment for a variety of recreational activities which do not impair the natural values of the area.
- Management direction	Improve visitor services related to information, interpretation, facility development and maintenance, and safety. Management actions that would be taken for the area are described in Table II-2. Protect remote characteristics by limiting type or amount of commercial recreation permits.
Mt. Trumbull Area	
- Designations	Designate the Mt. Trumbull as an RCA since recreation is one of the primary land uses as shown on Map II-6.
- Objectives	Manage the RCA to provide recreation opportunities in settings generally ranging from roaded natural to primitive. Promote the conservation of the area's multiple-use values for education, scientific study and public recreation activities.
- Management direction	Management actions that would be taken for the area are described in Table II-2.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Recreation Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
Canyons/Plateaus of the Paria	
- Designations	Designate the Canyons and Plateaus of the Paria area as an RCA (Map II-6).
- Objectives	Manage recreation in area to provide opportunities in settings ranging from roaded natural to primitive. Manage the RCA in a manner that would - Ensure continued public use and enjoyment for a variety of recreational activities and scientific studies. - Improve visitor services related to information, interpretation, administrative site, maintenance, and safety.
- Management direction	See Table II-2 for a description of the management prescription of this RCA.
Special Recreation Management Area Designation	Designate the Parashant, Mt. Trumbull, Canyons and Plateaus of the Paria RCAs and Virgin River Corridor, and Little Black Mountain ACECs as special recreation management areas to ensure greater recreation emphasis and investment (see Map II-11). Recreation would be managed to meet the objectives of the RCAs and ACECs as described in this Table II-1 and in Table II-2. All designated wilderness areas are considered SRMAs and would be managed according to their wilderness management plans.
Extensive Recreation Management Area (ERMA), VRM Class 3 and 4	
- Objectives	Provide settings for recreational opportunities associated with motorized vehicle use such as exploring backcountry roads, vehicle camping and picnicking. Allow for some changes in ROS classes from SPNM to semi-primitive, motorized (SPM) or from SPM to RN where deemed necessary to meet recreation needs or other resource development (see ROS setting descriptions, Appendix 17 (see Map II-12). However, the goal is to maintain the desired recreation settings. Provide recreational settings where restrictions on visitors are not noticeable, but blend with the natural setting.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Recreation Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
- Management direction	Develop district and individual resource area sign plans to provide road information for interpretation, public safety, and coordinate the plans with the Arizona Strip visitor map. Regulate visitor use only when monitoring indicates a need for limiting or restricting use.
Extensive Recreation Management Area (ERMA), VRM Class 1 and 2 - Objectives	Ensure continued public use and enjoyment of a variety of recreation activities which are compatible with the protection and enhancement of natural and cultural values. Enhance opportunities for high quality, backcountry recreation experiences and provide for a range of recreation activities, including camping, vehicle exploring, sightseeing, hiking, limited off-road travel, horseback riding, rock hounding and hunting (see Map II-12). Provide recreational settings where restrictions on visitors are subtle. Ensure maintenance of the desired resource and social settings.
- Management direction	Regulate visitor use only when monitoring indicates a trend toward unacceptable change to desired recreation settings brought about by such use. Inventory and develop sign plans compatible with the objectives of the area. Generally, signing would be the minimum necessary to provide for public safety and information.
WILD & SCENIC RIVERS (see Appendix 18 and Maps II-16 & 17 for eligibility and classification narrative) - Eligibility	Virgin River eligible for study (Appendix 18). Paria River eligible for designation (Appendix 18).
- Classification	Virgin River in Arizona potentially classified as wild from Utah state line to first I-15 bridge; scenic from I-15 bridge to Virgin River Campground; and recreational from the campground to Nevada state line (Map II-13). Paria River in Utah included in Paria Canyon Wilderness and the portion through the Glen Canyon National Recreation Area to the confluence of the Colorado River is classified as potentially wild and scenic (Map II-14 and Appendix 18).
- Suitability	The Paria River as defined above is recommended as suitable for designation as a Wild and Scenic River.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Recreation Resources (continued)	
CHANGES IN MANAGEMENT (continued):	
Change Agent	**Proposed Plan**
- Management direction	See Appendix 18 for interim management. Develop a plan for river running on the Virgin River to include put-in and take-out points, information on minimum flows needed to run the river, and acquisition of the current flow rate.
OHV DESIGNATIONS - Designations	Designate OHV use areas for the Arizona Strip District as follows (Map II-24): OPEN: 800 acres (for further evaluation) CLOSED: 93,000 acres (excludes wilderness) LIMITED TO DESIGNATED ROADS AND TRAILS: 646,800 acres LIMITED TO EXISTING ROADS AND TRAILS: 1,541,200 acres See Appendix 19 for OHV designations. The closed areas on the Beaver Dam Slope and Marble Canyon rim have primary roads bisecting them. Allow the annual Rhino Rally motorcycle race but restrict primarily to roads and washes and limit to 300 entrants (see Map II-15).
- Management direction	Complete an OHV management plan designating roads to be open, limited or closed. Prepare information for the public such as maps, brochures and signs as well as specific definitions for the OHV classes, exceptions, if any, and how these exceptions would be managed. Close all sand dunes around Cottonwood Wilderness Area to all forms of vehicle use.
VISUAL RESOURCES - Classifications	Assign VRM classes for the Arizona Strip District as follows: 276,000 acres as Class I; 838,000 acres as Class II (includes the primary travel corridors); 528,000 acres as Class III; 1,481,000 acres as Class IV (Map II-12 and Appendix 20). 22,000 acres in the Virgin River Gorge are in a scenic withdrawal. 265,600 acres are assigned Class I due to wilderness designation.
- Management guidance	Support the designation of the Virgin River Gorge (I-15) and Highway 89A as scenic byways. Consider designating backcountry byways as more information becomes available on environmental considerations.
- Improvement areas	Activities which would cause adverse long-term impacts to the important visual resources in the following areas would be prohibited or mitigated to the extent practicable: Hurricane Rim, Upper and Lower Grand Wash Cliffs; Diamond Butte; Moccasin Mountain; Andrus, Parashant, Grama and Kanab Creek canyons. Improve the aesthetics of the acquired lands in the Parashant area by feathering the edges of the seedings.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Wilderness

MANAGEMENT GUIDANCE:

The district's wilderness program includes eight designated wilderness areas encompassing 265,600 acres. BLM is mandated to manage these areas for their wilderness values by the authority of FLPMA of 1976, the Wilderness Act of 1964, the Arizona Wilderness Act of 1984, 43 CFR 8560 and BLM Manual 8560. Wilderness management plans have been completed for the Paria Canyon-Vermillion Cliffs, Mt. Trumbull-Mt. Logan, Paiute-Beaver Dam Mountains, Grand Wash Cliffs wilderness areas. A draft plan for Cottonwood Point wilderness area has been developed. A plan for Kanab Creek wilderness area is being jointly prepared by BLM and the Forest Service.

BLM's policy is to manage wilderness areas in accordance with the laws and congressional intent so as to preserve their wilderness character, and for the use and enjoyment of the American people in a manner that will leave them unimpaired for future use and enjoyment as wilderness. Congress provided for certain activities and existing uses, known as nonconforming but accepted uses, which otherwise would have been prohibited in wilderness areas. They include, but are not limited to, existing private rights, livestock grazing, water resource development and commercial recreation services.

Goals: Wilderness management goals include long-term protection and preservation of the areas' wilderness character under a principle of non-degradation; management of wilderness areas for the use and enjoyment of visitors in a manner that will leave the areas unimpaired for future use and enjoyment as wilderness; using minimum tool, equipment or structure necessary to successfully, safely and economically accomplish objectives; and to manage non-conforming uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the areas' wilderness character.

EXISTING PLANS AND DECISIONS:

- Wilderness management plans for Paiute-Beaver Dam Mountains, Paria Canyon-Vermillion Cliffs, Mt. Trumbull/Mt. Logan, Grand Wash Cliffs, and draft wilderness management plans for Cottonwood Point and Kanab Creek.

CHANGES IN MANAGEMENT:

- None

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Transportation/Access

MANAGEMENT GUIDANCE:

Roads would be built and maintained to support resource management objectives. Maintenance and construction requirements and priorities are determined on a yearly basis as a part of the annual work planning process. Emergency reconstruction and maintenance of roads damaged by flooding is handled on a base-by-case basis when the need arises.

Specific road and trail construction standards are determined based on consideration of resource management needs. These include user safety and impacts to environmental values such as wildlife habitat, soil stability, recreation, visual resources and construction and maintenance costs.

Maintain the open space, scenic character and remoteness of public lands. Maintain existing access where needed to meet public and administrative needs.

EXISTING PLANS AND DECISIONS:

- Upgrade Quail Hill road to a graveled, all-season access road.

CHANGES IN MANAGEMENT:

Change Agent	Proposed Plan
- Existing roads	Close and rehabilitate existing roads where no public or administrative need exists in areas where closed to OHV or where OHVs are limited to designated roads and trails. Reclaim newly constructed access after termination of the specific need (646,800 acres; Map II-15).
- Access	Acquire legal vehicular access across private and state lands (see Appendix 21). Appendix 21 is only an initial list which is subject to additions or deletions. Develop and maintain an active road/access transportation plan that supports the resource programs and uses identified in this plan.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Fire Management

MANAGEMENT GUIDANCE:

The authority for fire management on public land comes from FLPMA, Protection Act of 1922, Reciprocal Fire Protection Act of 1955, TGA of 1934 and others. Interior Manual 910 and BLM Manual 9200 give further guidance on public land fire management.

Current BLM policy states that every wildland fire is either a wildfire or a prescribed fire. A wildfire must have appropriate actions taken to suppress it. Appropriate actions are based on preplanned analysis consistent with land management objectives, including threats to life and property. Fire suppression actions must be planned and executed to minimize suppression costs plus resource losses, consistent with management objectives. A Fire Management Activity Plan has been completed for the district. The fire management activity plan identifies full suppression within desert tortoise habitat. An analysis will be prepared to govern suppression actions for all escaped fires.

Much of the Arizona Strip District can be improved through the use of prescribed fire. Prescribed fires are used to improve livestock forage, wildlife habitat, and watershed conditions, and to reduce fire hazard.

If a fire is reported in an area covered by a preplanned prescription, a qualified observer may record weather and fire conditions. Generally these fires are in areas of low resource values, contained within natural or man-made barriers, and have no long duration potential.

Special policies, considerations, and procedural requirements apply to suppression of fires in wilderness areas. A minimum tool policy is used in suppressing wildfires in wilderness areas, emphasizing hand crews. Aircraft and other mechanized suppression methods may be used in emergency situations if approved and necessary. A wilderness specialist is assigned to fires in wilderness areas to insure that wilderness needs, considerations and policies are incorporated into suppression decisions, strategies, operations and rehabilitation.

Prescribed fire will be allowed in wilderness areas as it benefits wilderness resources and as specified in wilderness management plans.

Wilderness fire management plans have been completed and implemented for all wilderness areas in the district.

Fire management objectives have been set for the four established fire management zones (FMZ) within the district (see Map II-16). The objectives are specific to areas called representative locations (RL) within the FMZs and to special associated public land management considerations and resource values. These are only objectives and may be adjusted at a later date to more accurately portray the district's suppression capabilities.

FMZ-1 Grassland

RL-1: Hold individual fires to 300 acres or less in the Pakoon Basin, 8 years out of 10 years to protect the fragile desert environment and the desert tortoise habitat.
RL-2: Hold individual fires to 500 acres or less in the Clayhole and Hurricane Valleys to protect watersheds and other values specified in activity plans.
RL-3: Hold individual fires to 500 acres or less in Houserock Valley to protect watersheds and other values specified in activity plans.

FMZ-2 Brush

RL-1: Hold individual fires to 10 acres or less on the Beaver Dam Slope ACEC and adjacent lands to protect desert tortoise habitat.
RL-2: Hold individual fires to 500 acres or less to protect watersheds and other values specified in activity plans.
RL-3: Hold individual fires to 500 acres or less in Houserock Valley to protect watersheds and other values specified in activity plans.

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Fire Management (continued)

OBJECTIVES (Continued):

FMZ-3 Pinyon-Juniper

RL-1: Hold fires to 600 acres or less in the Shivwits Resource Area to protect watersheds and other values identified in activity plans.
RL-2: Hold fires to 500 acres or less in the Mt. Trumbull and Buckskin Mountain areas to protect watersheds and other values identified in activity plans.
RL-3: Hold fires to 500 acres or less on the Paria Plateau to protect watershed values and other values identified in activity plans.

FMZ-4 Ponderosa Pine

RL-1: Hold individual fires with intensity levels of 3 or 4 to 10 acres or less to prevent damage to the ponderosa pine stands.
RL-2: Hold individual fires with intensity levels of 3 or 4 to 10 acres or less to prevent damage to the ponderosa pine stands.

APPLICATION OF FIRE:

1. Naturally ignited prescribed fires could be utilized, but only after appropriate objectives have been established for the area(s) involved and a prescription has been prepared and approved.

2. Use BLM planned and ignited prescribed burns to improve wildlife, watershed and livestock forage conditions.

3. Use prescribed fire for hazard fuel reduction.

FIRE MANAGEMENT CONSTRAINTS:

1. Wilderness Areas - Fire suppression in wilderness areas will be conducted in accordance with wilderness management plans.

2. Cultural Resources - Fire management operations must follow established guidelines and procedures to protect cultural resources.

3. Threatened/Endangered Species - Fire management will be sensitive to the existence of special status vegetation and wildlife species and associated protective requirements.

EXISTING PLANS AND DECISIONS:

- Fire management plans for each wilderness area and district fire management plan.

CHANGES IN MANAGEMENT:

- None

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Hazardous Materials (HAZMAT) Management

MANAGEMENT GUIDANCE:

The three laws most commonly associated with HAZMAT include the Resource Conservation and Recovery Act (RCRA), or PL 94-580; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or PL 96-510, otherwise known as the Superfund Act; and the Superfund Amendment Reauthorization Act (E.O. 12580, 1986). BLM responsibilities under these acts include conformance with Arizona Department of Environmental Quality, Ground Water Protection Permit System and state RCRA enforcement regulations pertaining to the storage, handling and disposal of hazardous materials and reporting unpermitted HAZMAT discharges under the provisions of CERCLA. Action by BLM includes reporting, necessary site security, coordination of procedural cleanup steps, and monitoring results of the cleanup.

EXISTING PLANS AND DECISIONS:

- Arizona Strip District Hazardous Material Response Plan.

CHANGES IN MANAGEMENT:

- None

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Environmental Management
MANAGEMENT GUIDANCE: In compliance with NEPA and CEQ regulations, BLM would prepare site-specific environmental reviews before actions proposed in this RMP/EIS are implemented. The environmental reviews provide site-specific assessments of the impacts of implementing these actions. As appropriate, these reviews are documented in Administrative Decisions, Categorical Exclusion Reviews, Environmental Assessments and Decision Records, or Environmental Impact Statements and Records of Decision. In addition, BLM assures that threatened and endangered species and cultural resources are inventoried as a part of the environmental review process. The review identifies mitigation necessary to avoid or reduce the adverse impacts of implementing a proposed action. All environmental documents are available for public review. Make decisions through apprpriate public involvement and consultation, cooperation and coordination with ranchers, affected landowners, interest groups and other agencies.
EXISTING PLANS AND DECISIONS: - None
CHANGES IN MANAGEMENT: - None

TABLE II-1
DESCRIPTION OF PROPOSED PLAN

RESOURCE: Law Enforcement

MANAGEMENT GUIDANCE:

The authority for law enforcement on public lands comes from FLPMA Sec. 303. This section authorizes the Secretary of the Interior to issue rules and regulations pertaining to management, use, and protection of public lands; enter into cooperative agreements with local law enforcement agencies, and/or authorize federal personnel to carry out law enforcement responsibilities. BLM Manual 9260 gives further guidance on law enforcement on public lands.

The goal of law enforcement on the Arizona Strip is the prevention of violations of federal law relating to public lands through voluntary compliance of applicable laws. This is best accomplished by educating the users of public lands and through regular patrols by the district ranger(s). When voluntary compliance is not possible, district and state law enforcement personnel are responsible for the enforcement of applicable laws and regulations as they relate to the use, management, and development of public lands and resources and public safety.

EXISTING PLANS AND DECISIONS:

- None

CHANGES IN MANAGEMENT:

- None

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
BEAVER DAM SLOPE	Desert Tortoise	ACEC (20,800 acres)	Acquire non-federal lands as opportunities arise within tortoise habitat. Manage utility corridor to meet needs of applicant and in accordance with BLM's Rangewide Desert Tortoise Plan.	Open to mineral exploration and development. Plan of operation required to eliminate impacts to desert tortoise. Close to mineral material disposals.	Open to leasing subject to the requirements imposed by the OHV closure. Activities may be limited by season as needed to protect habitat of the desert tortoise.	----	Manage consistent with the Rangewide Desert Tortoise Plan category guidelines, the Endangered Species Act, and revise AMPs to incorporate rangewide plan requirements.	Allow only temporary upgrading of existing roads. Allow new roads only on a temporary basis or if positive benefit to desert tortoise. Close and rehabilitate roads determined not necessary for public access. Reroute existing roads where feasible to improve manageability of tortoise habitat.	----	Close to OHV (primary roads bisect the closed area).	All activities managed according to guidelines of BLM's Rangewide Desert Tortoise Plan and the draft Arizona Desert Tortoise Implementation Strategy. Increase public awareness through signs, information and eduction. Implement ranger patrol. Conduct ecological site inventory and appropriate research.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
VIRGIN RIVER CORRIDOR	Riparian Endangered Fish Scenic Values	ACEC (8,100 acres)	Acquire lands with riparian and high resource values as opportunities arise.	Continue withdrawal from mineral location in Virgin River Gorge. Plan of operation required for portion of ACEC between existing withdrawal and Nevada state line. Special mitigation required to minimize impacts to riparian, scenic and recreation values and avoid impacts to endangered fish species. Close to mineral material disposals.	Open to lease in Virgin River Gorge subject to the no-surface occupancy stipulation. Other areas are open to leasing subject the standard terms and conditions.	Study river for wild and scenic values. Write an activity plan to provide a variety of visitor uses in the Virgin River Campground and surrounding areas including longer term visitor use, tent and self-contained camping, river running and recreation and wilderness use. Include a detailed plan for operating and maintaining campground facilities.	Continue existing rangeland management. Monitor condition and trend and adjust management accordingly. In riparian areas plan grazing management to accommodate growth requirements of riparian vegetation species, cottonwood, willow, etc.	Allow only temporary upgrading of existing roads. Allow new roads on a temporary basis only. Upgrade campground loop and access roads to accommodate modern recreational vehicles.	Open to woodland product sales on a case-by-case basis when beneficial to riparian resources. Allow collection of dead-and-down wood for personal campsite use only.	Limit to designated roads and trails. Implement ranger patrol.	Acquire in-stream water rights. Emphasize fire control and management. Control exotic wildlife species and feral livestock. Monitor for water quality.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
LITTLE BLACK MOUNTAIN	Cultural	ACEC (200 acres)	Retain in public ownership.	Open to mineral exploration and development. Plan of operation required with special mitigation to avoid impacts to cultural resources. Close to mineral material disposals.	----	Interpret area for public use.	Fence site for protection.	Improve road access, provide a parking area.	----	Limit to designated roads and trails except in the fenced, closed area.	Implement ranger patrol. Implement site steward patrols.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
FORT PIERCE	Endangered Species (Pediocactus sileri) Critical Watershed	ACEC (900 acres)	Retain in public ownership.	Open to mineral exploration and development. Plan of operation required with special mitigation to avoid impacts to Pediocactus sileri and critical watershed values. Close to mineral material disposals.	----	----	Maintain existing natural vegetation. Manage to improve vegetation diversity and cover.	----	----	Limit to designated roads and trails.	Develop a watershed activity plan.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
MARBLE CANYON	Endangered Species (Pediocactus bradyi) Scenic Raptors	ACEC (10,700 acres)	Acquire state land in T38N R6E Sec. 16. Do not allow R/W construction, airports, landfills or other surface disturbance which cannot be fully mitigated or totally compatible with area's special values.	Open to mineral exploration and development. Plan of operation required with special mitigation to avoid impacts to Pediocactus bradyi for all surface disturbance or motorized use. Letters will be sent to all claimants to advise them of Pedio habitat. Close to mineral material disposals.	Open to lease subject to seasonal stipulations. See Map II-5.	Allow car camping at designated overlooks associated with cherry-stemmed roads. Manage to maintain VRM Class II.	Prohibit vegetation manipulation or projects unless they benefit or enhance the management of Pediocactus bradyi. There are no current plans for land treatments.	Low maintenance on boundary and overlook roads. Sign all existing roads within ACEC closed to motorized use.	Not applicable.	Close to OHV use.	Maintain compatible management with Grand Canyon National Park. See Appendix 5.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
JOHNSON SPRING (2,400 acres) LOST SPRING MOUNTAIN (9,800 acres) MOONSHINE RIDGE (5,500 acres)	Cultural Endangered Species (Pediocactus sileri)	ACEC (17,700 acres)	Acquire state and private inholdings if available and in the public interest. Discourage R/Ws across area.	Open to mineral exploration and development. Plan of operation required with special mitigation to avoid impacts to cultural resources or Pediocactus sileri. Close to new requests for mineral material disposals. Existing material sites will be evaluated for retention.	Open to leasing subject to standard terms and conditions.	Conduct Class II cultural inventory and refine boundary based on data if appropriate. Develop a Cultural Resource Management Plan (CRMP). Manage for information, conservation and public use based on CRMP.	No new range improvements allowed generally within 100 yards of significant cultural properties. No mechanical vegetation manipulation allowed unless it benefits or improves Pediocactus sileri's management.	Close unnecessary roads.	Close to all woodland product sales.	Limit to designated roads and trails.	Implement ranger patrol. See Appendix 5.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
WITCH POOL (260 acres) NAMPAWEAP (550 acres)	Cultural	ACEC (810 acres)	Do not approve R/Ws across ACECs.	Open to mineral exploration and development. Plan of operation required with special mitigation to avoid impacts to cultural resources. Close to mineral material disposals.	Open to leasing subject to standard terms and conditions.	Conduct Class III cultural inventory and prepare CRMP. Manage areas for public use in accordance with the Mt. Trumbull SRMA.	No vegetation conversions allowed. No new range improvements allowed generally within 100 yards of significant sites.	No new roads.	Close to all woodland product sales.	Limit to designated roads and trails.	Implement ranger patrol. See Appendix 5.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
CANYONS/ PLATEAUS OF THE PARIA	Cultural Recreation Scenic Wilderness Recreation Wildlife	RCA (227,000 acres)	Acquire state and private inholdings on Paria Plateau. Discourage above-ground R/W on the Paria Plateau. Corridor in Ferry Swale ½-mile wide. Don't authorize landfills or airports on the Paria Plateau.	Open to mineral exploration and development. Close to mineral material disposals on the Paria Plateau, Vermillion Cliffs Natural Area and Paria Canyon-Vermillion Cliffs Wilderness are closed to locatable mineral entry.	Open to leasing subject to standard terms and conditions except within 1 mile of Paria Plateau Canyon rim and Vermillion Cliffs where seasonal restrictions apply (see Map II-5). Paria Canyon-Vermillion Cliffs Wilderness is closed to oil and gas leasing.	Develop CRMP. Conduct Class II recreation inventory. Write Recreation Activity Management Plan (RAMP) for area that emphasizes natural backcountry setting. Develop plan for Arizona Trail. Sign for public safety and special features. Paria Plateau is a Special Recreation Management Area.	Manage for good to excellent ecological condition. Revise AMPs to be consistent with wilderness management plan (WMP), CRMP and RAMP.	Close unnecessary roads. Low maintenance level for open roads.	The Paria Plateau is closed to fuelwood cutting at least until RCA plan is prepared and OHV designations are implemented. Area is open to personal Christmas tree cutting and pinenut gathering.	Limit to designated roads and trails on plateaus. Limit to existing roads and trails in Ferry Swale.	Establish a BLM administration site. Implement ranger patrol. Maintain Class II VRM north of powerline (500 kV) and maintain Class II VRM for remainder. Recommend Paria River as suitable for a wild and scenic river designation. Support Paria Canyon-Vermillion Cliffs WMP. See Appendix 5.

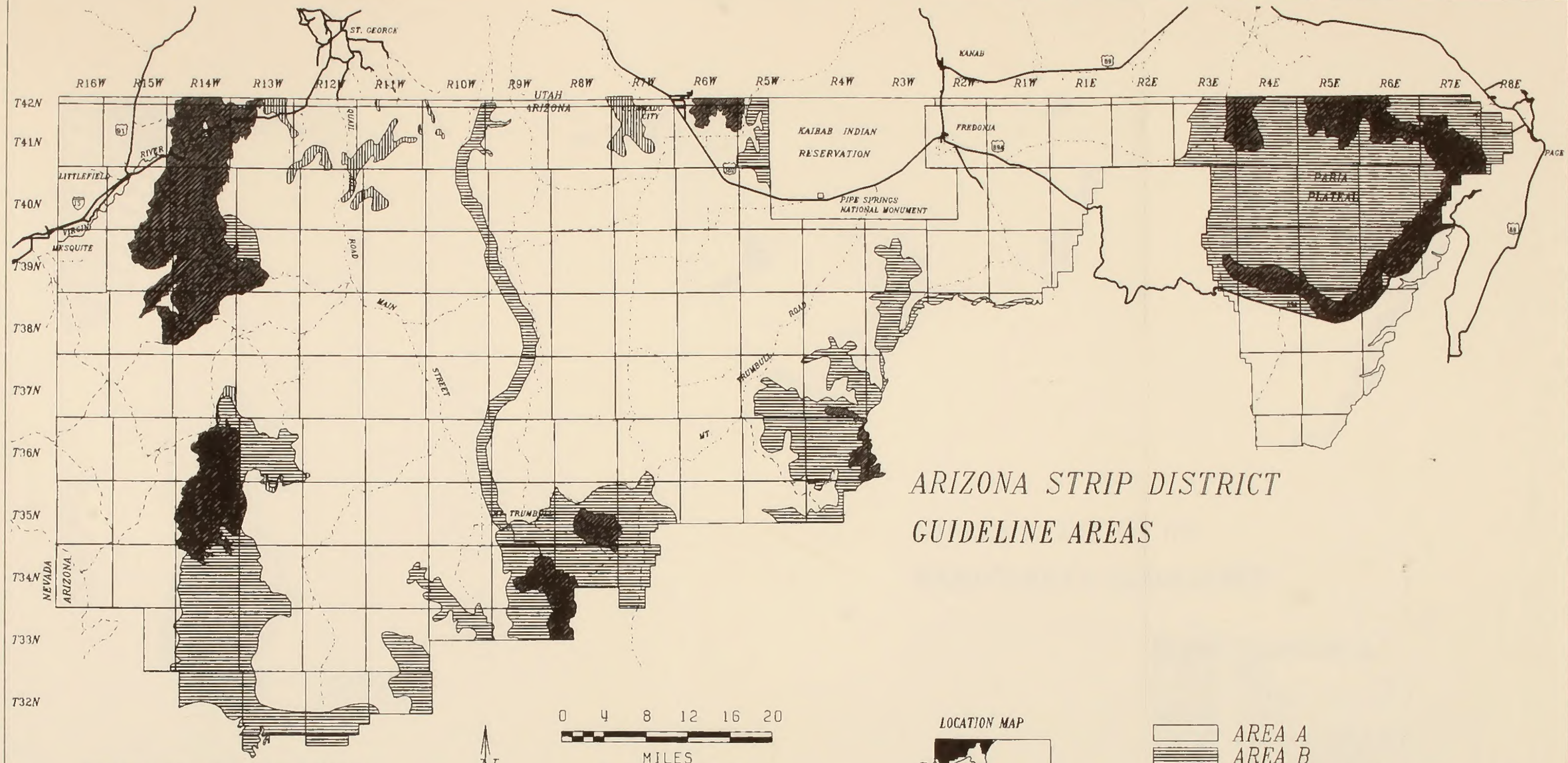
TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
PARASHANT AREA	Wildlife Habitat Livestock Grazing Recreation Watershed	RCA (51,000 acres)	Where feasible place linear R/Ws underground along existing roads.	Allow locatable mineral exploration and development subject to special stipulations attached to plans of operation to maintain and restore unique features and remoteness. These stipulations would be developed to address site-specific needs.	----	Provide a broad spectrum of backcountry opportunities with low managerial oversite and regulation. Protect and interpret historical features. Conduct a Class II cultural resource inventory. Protect remote character by limiting number or types of commercial recreation permits if necessary.	No new permanent grazing authorizations. Grazing will be at BLM discretion to provide additional rest on other allotments needing rest due to fire damage, vegetation treatments, or to establish an AMP grazing system. Ensure range improvement maintenance.	No new permanent roads or improved access. Maintain existing access roads.	Manage for enhancement of other resource values.	Limit to designated roads and trails.	Investigate possibility of introducing Kaibab squirrel. Manage fire for preplanned enhancement of resource values. Write a coordinated plan integrating management of resource programs. Complete coordinated resource plans for riparian areas. Construct fire and visitor administrative site.

TABLE II-2
MANAGEMENT PRESCRIPTIONS FOR SPECIAL MANAGEMENT AREAS
Resource Conservation Areas (RCAs) and Areas of Critical Environmental Concern (ACECs)

SITE OR AREA	VALUES	DESIGNATION	LANDS	LOCATABLE & MINERAL MATERIAL MGT	FLUID MINERALS	CULTURAL/ RECREATION	RANGE MGT	ROADS AND ACCESS	FOREST & WOODLAND MGT	OFF-HIGHWAY VEHICLES (OHV)	OTHER
MT. TRUMBULL AREA	Wilderness Wildlife Habitat Livestock Grazing Recreation Ponderosa Forest Cultural Resources Scenic Values Watershed	RCA (108,000 acres)	Acquire state and private lands. Authorize Tuweep airstrip when state section is acquired. Where feasible place linear R/Ws underground along existing roads. Provide special stipulation to protect archaeological resources on all roads maintained through specific authorizations.	Open to mineral exploration and development. Manage the mineral material program in accordance with the surface disturbance stipulations found in Appendix 5.	Open to leasing subject to standard terms and conditions.	Recreation: Complete level III recreation inventory. Manage for ROS classes as shown on Map III-21. Sign for public safety and enjoy-ment. Classify as an SRMA. Develop user facilities at minimum level to reduce recreational impacts to area. Maintain Trumbull hiking trail to top of mountain only. Cultural: Develop CRMP and designate use categories. Manage for public use, information, and conservation. Interpret Temple Trail and Sawmill site/Uinkaret Puebloes.	Range: Revise AMPs to be compatible with RCA and wilderness management plan. Watershed: Continue implementation of Langs Run Watershed Management Plan. Conduct vegetation conversions to restore watershed.	Maintain roads on transportation system. Low maintenance on other roads when authorized. Rehabilitate any temporarily upgraded roads to original design.	Forests: Manage under category C. Maintain a healthy, viable and biologically diverse forest ecosystem. Develop a forest management program. Woodlands: Cut in designated areas only. Conduct vegetation treatments to restore ecological conditions, improve watershed conditions or restore natural appearance.	Limit to designated roads and trails.	Visual: Class II, III. Establish criteria for development. Wildlife: Focus management on deer, turkey, Kaibab squirrel habitat and T&E species. Revise HMPs as appropriate to be compatible with RMP, RCA and WMP. See Appendix 5. Support Trumbull-Logan Wilderness Management Plan. Maintain compatible management with Grand Canyon National Park.





BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



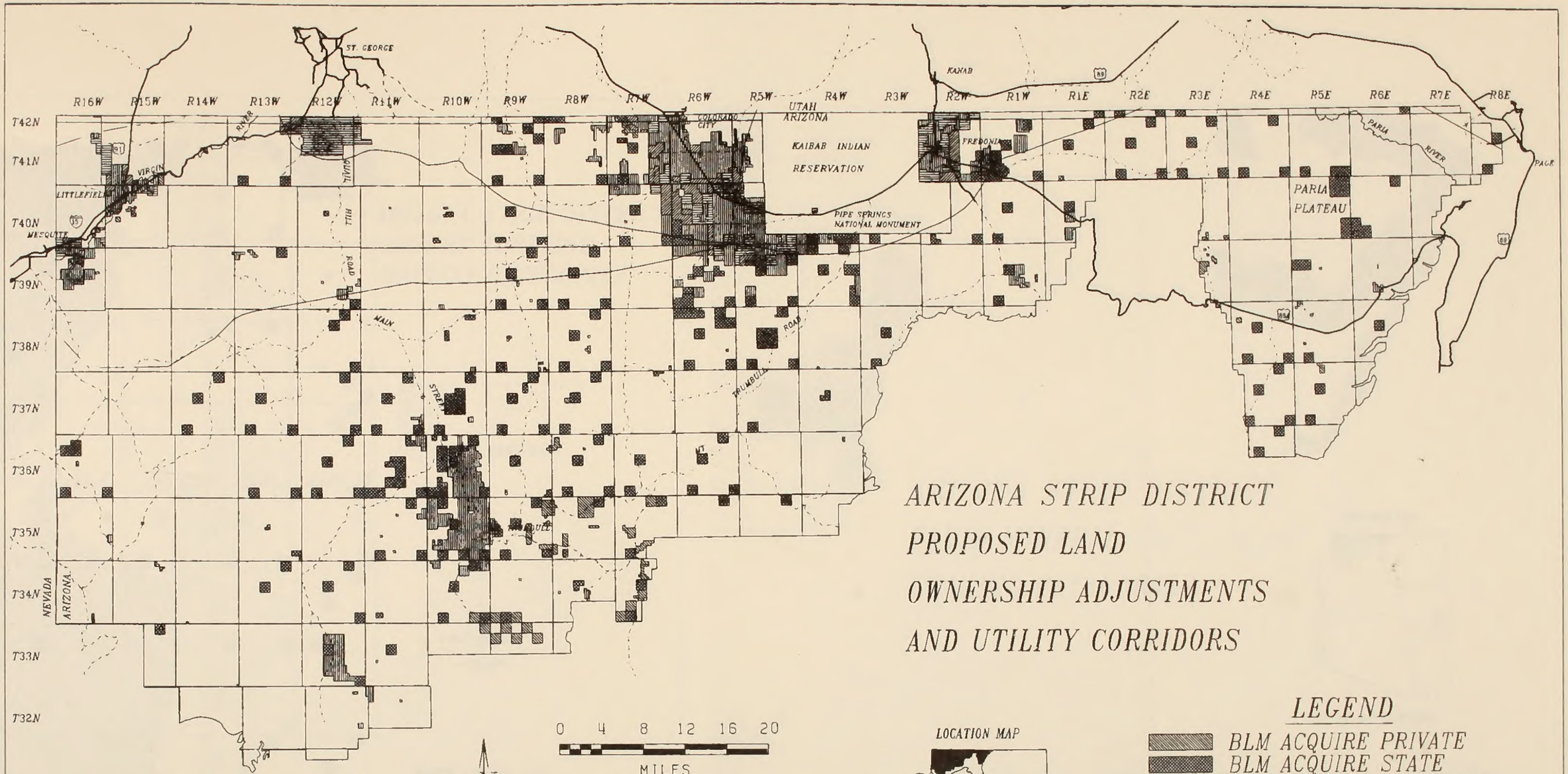


ARIZONA STRIP DISTRICT
IMPLEMENTATION OF
MANAGEMENT GUIDELINES

WILDERNESS
RCA
SRMA
ACEC
FMLCPEREGRINE
FMLCBIGHORN
FMLCVRM
FMLCVRM>30%
VIRG.RIV.WDL
VERMILION N.A.
VRM CLASS II
OHV CLOSED
OHV LDR&T
GAME PRESERVE

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





ARIZONA STRIP DISTRICT
PROPOSED LAND OWNERSHIP ADJUSTMENTS AND UTILITY CORRIDORS

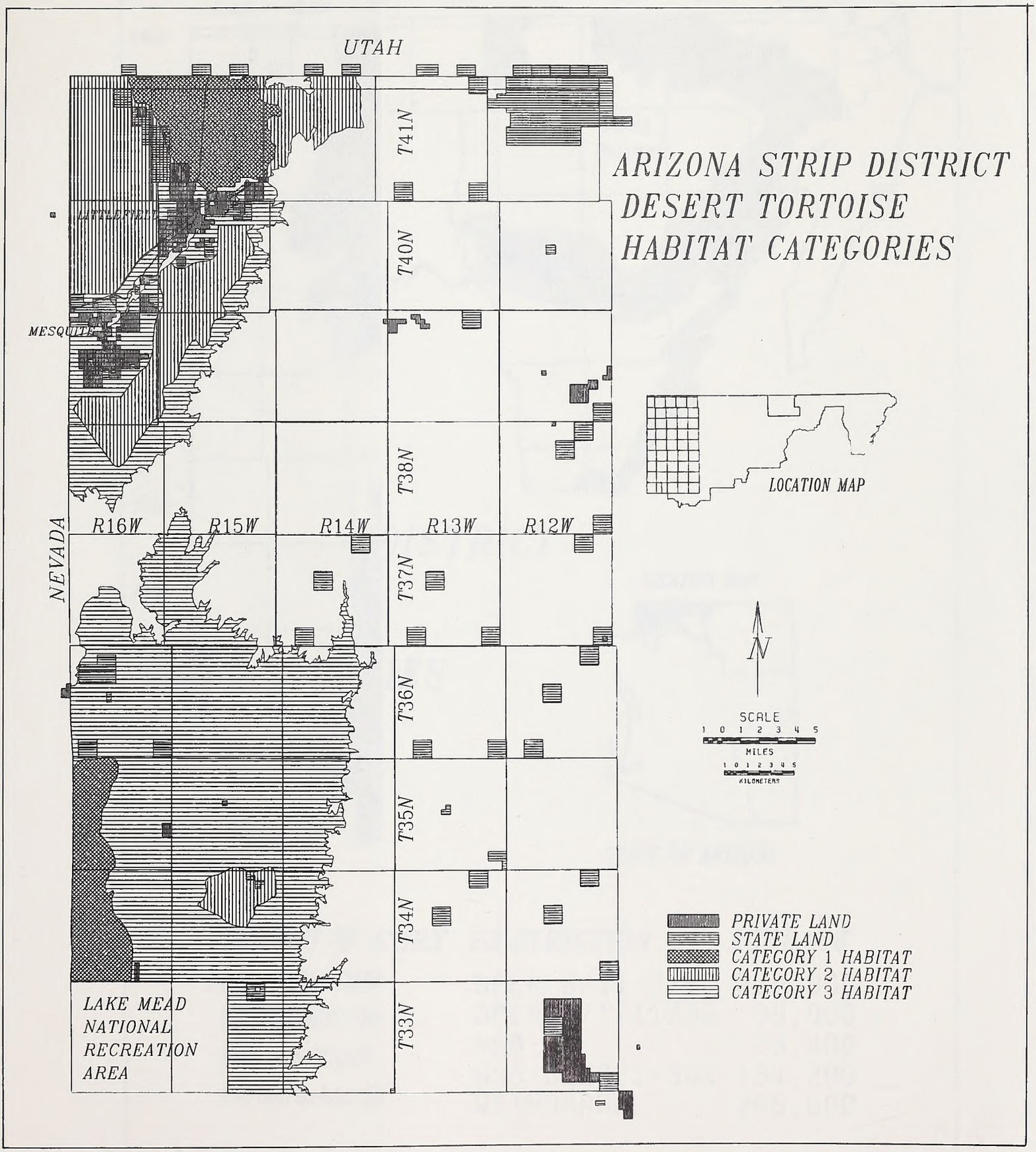
LEGEND

- BLM ACQUIRE PRIVATE
- BLM ACQUIRE STATE
- BLM EXCHANGE OR SALE
- STATE LAND
- PRIVATE LAND
- UTILITY CORRIDOR
- NO CORRIDOR DESIGNATED

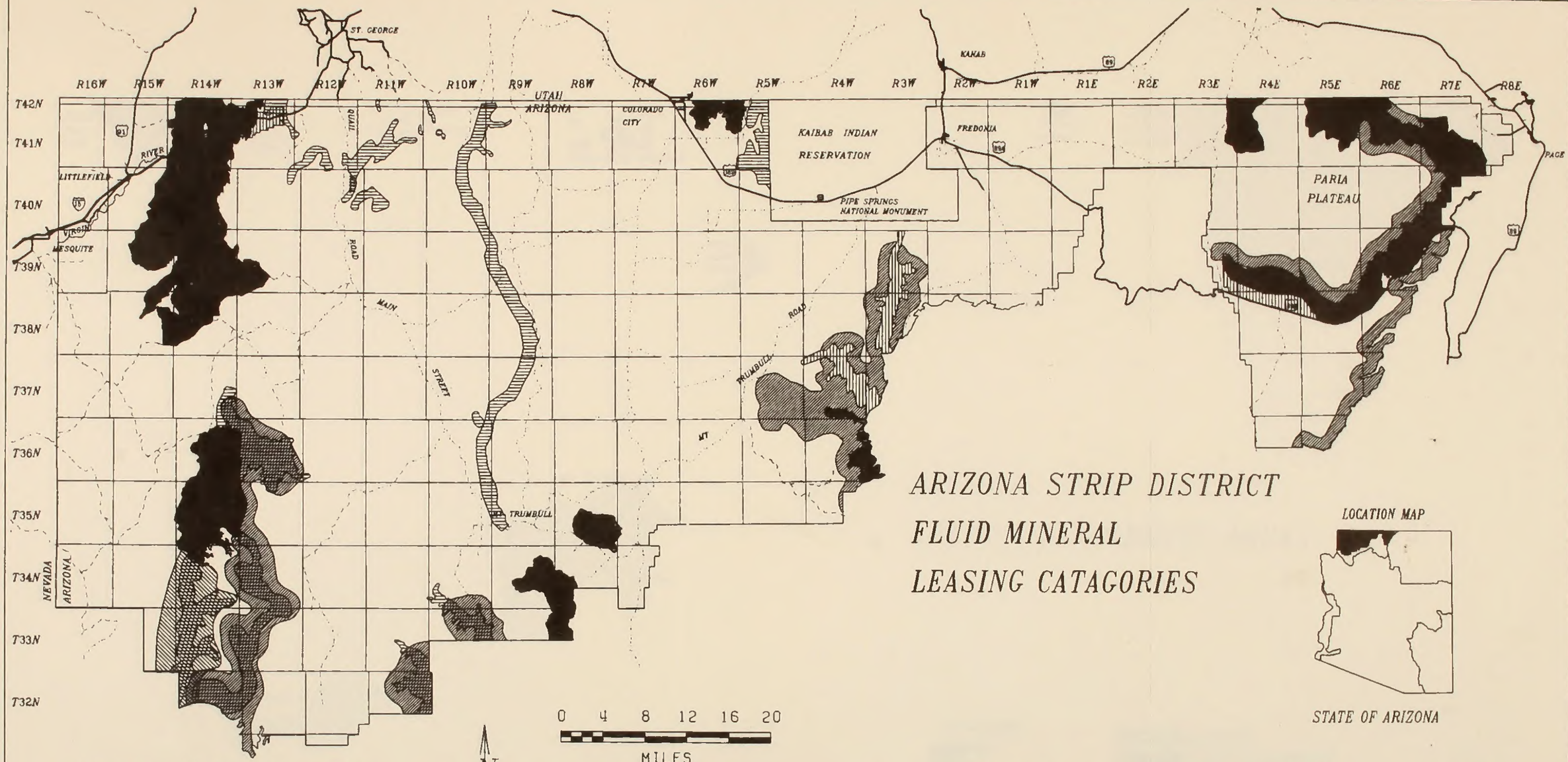
*ALIGNMENTS MADE ON A CASE BY CASE BASIS

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System




UTAH
NEVADA
LITTLEFIELD
MESQUITE
T41N
T40N
T38N
T37N
T36N
T35N
T34N
T33N
R16W
R15W
R14W
R13W
R12W
LAKE MEAD
NATIONAL
RECREATION
AREA
ARIZONA STRIP DISTRICT
DESERT TORTOISE
HABITAT CATEGORIES
LOCATION MAP
N
SCALE
1 0 1 2 3 4 5
MILES
1 0 1 2 3 4 5
KILOMETERS
PRIVATE LAND
STATE LAND
CATEGORY 1 HABITAT
CATEGORY 2 HABITAT
CATEGORY 3 HABITAT





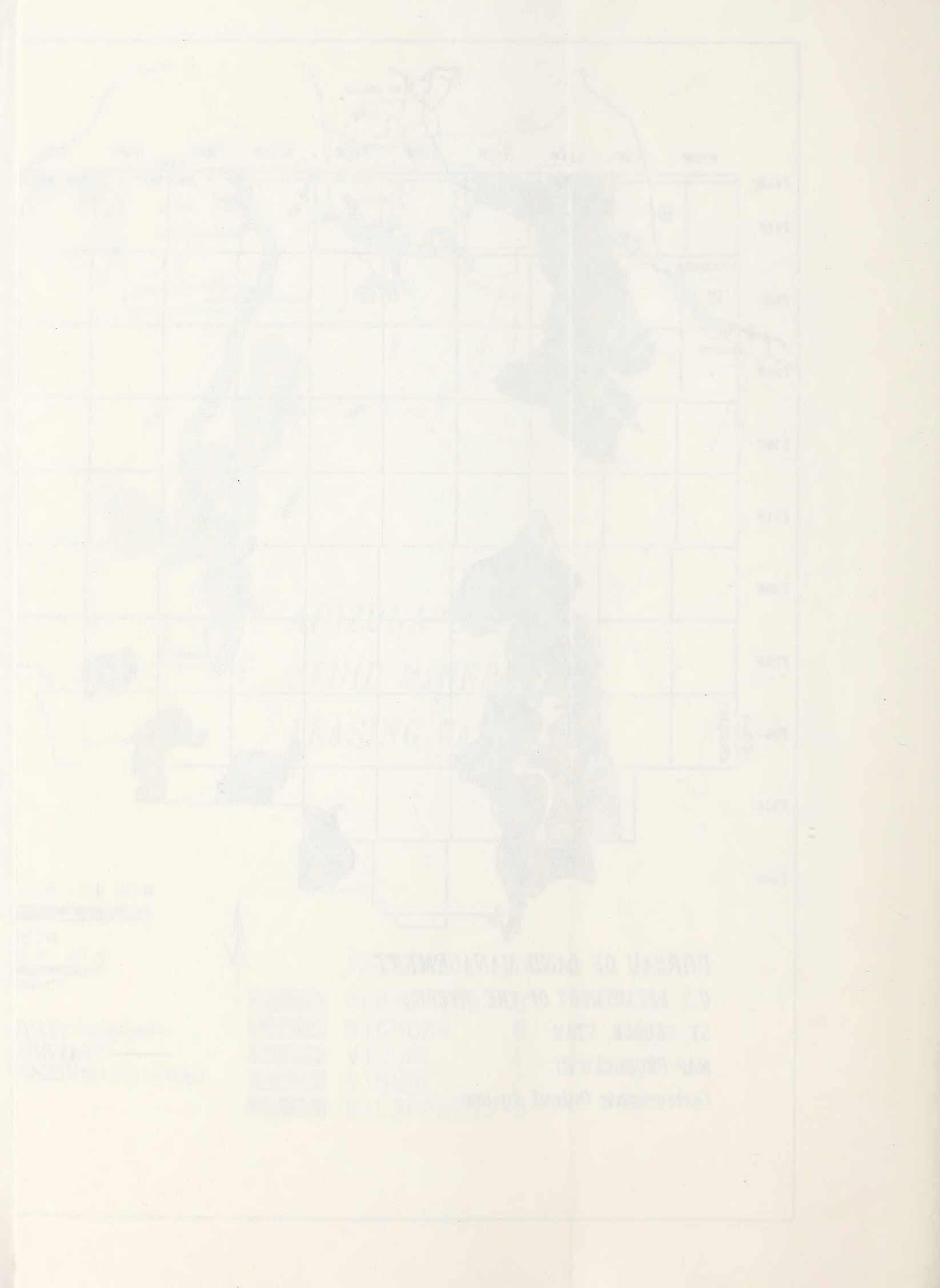
ARIZONA STRIP DISTRICT
FLUID MINERAL
LEASING CATAGORIES

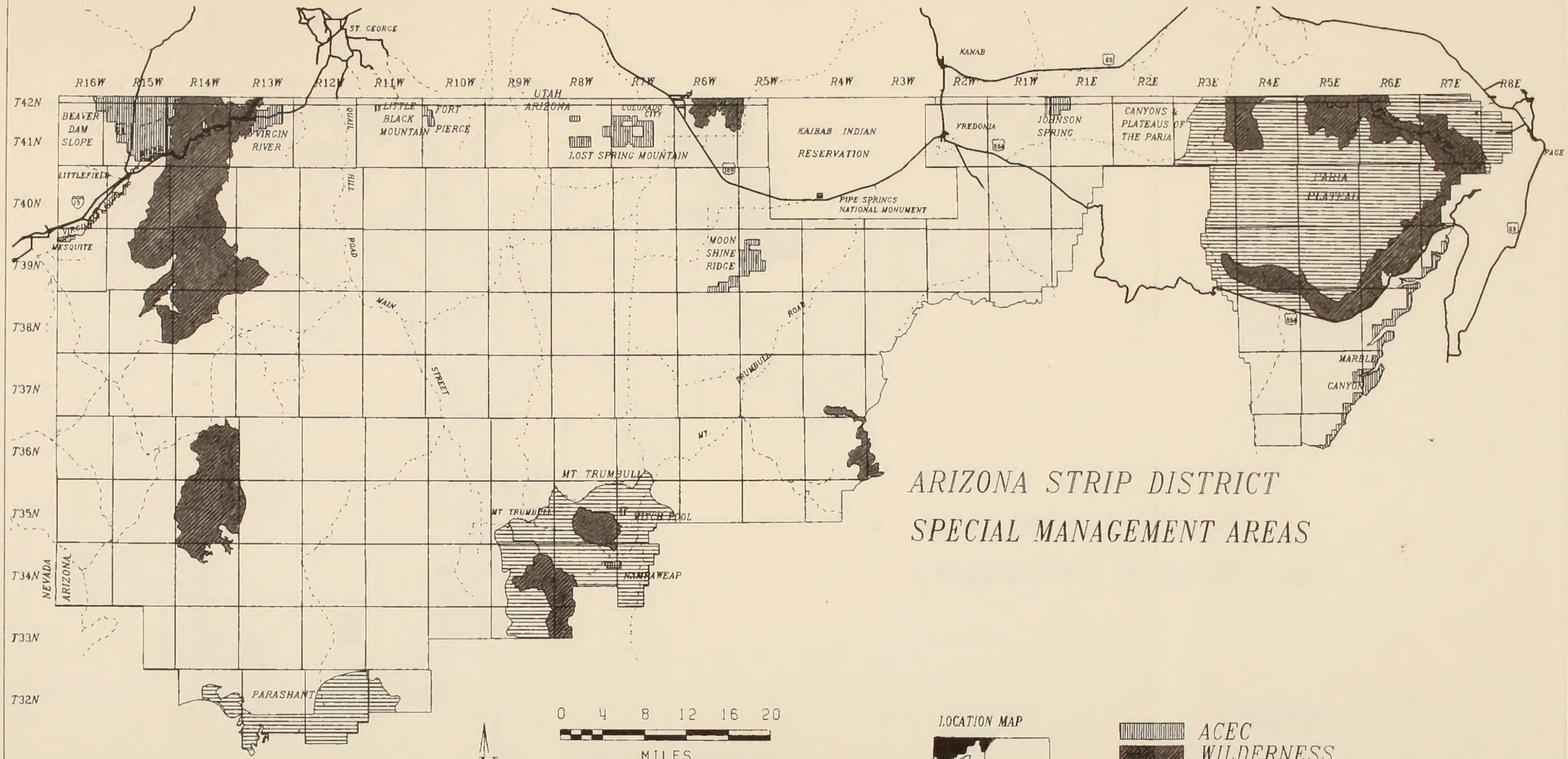
LOCATION MAP

STATE OF ARIZONA

FEATURE	CATAGORY	RESTRICTION	ACREAGE
PEREGRINE	B	OPEN 8/11-3/1	230,000
BIGHORN	B	OPEN 6/1-11/30	39,000
VISUAL	C	NSO	23,400
VISUAL	C	NSO SLOPES>30%	134,200
WILDERNESS	D	WITHDRAWAL	265,600

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

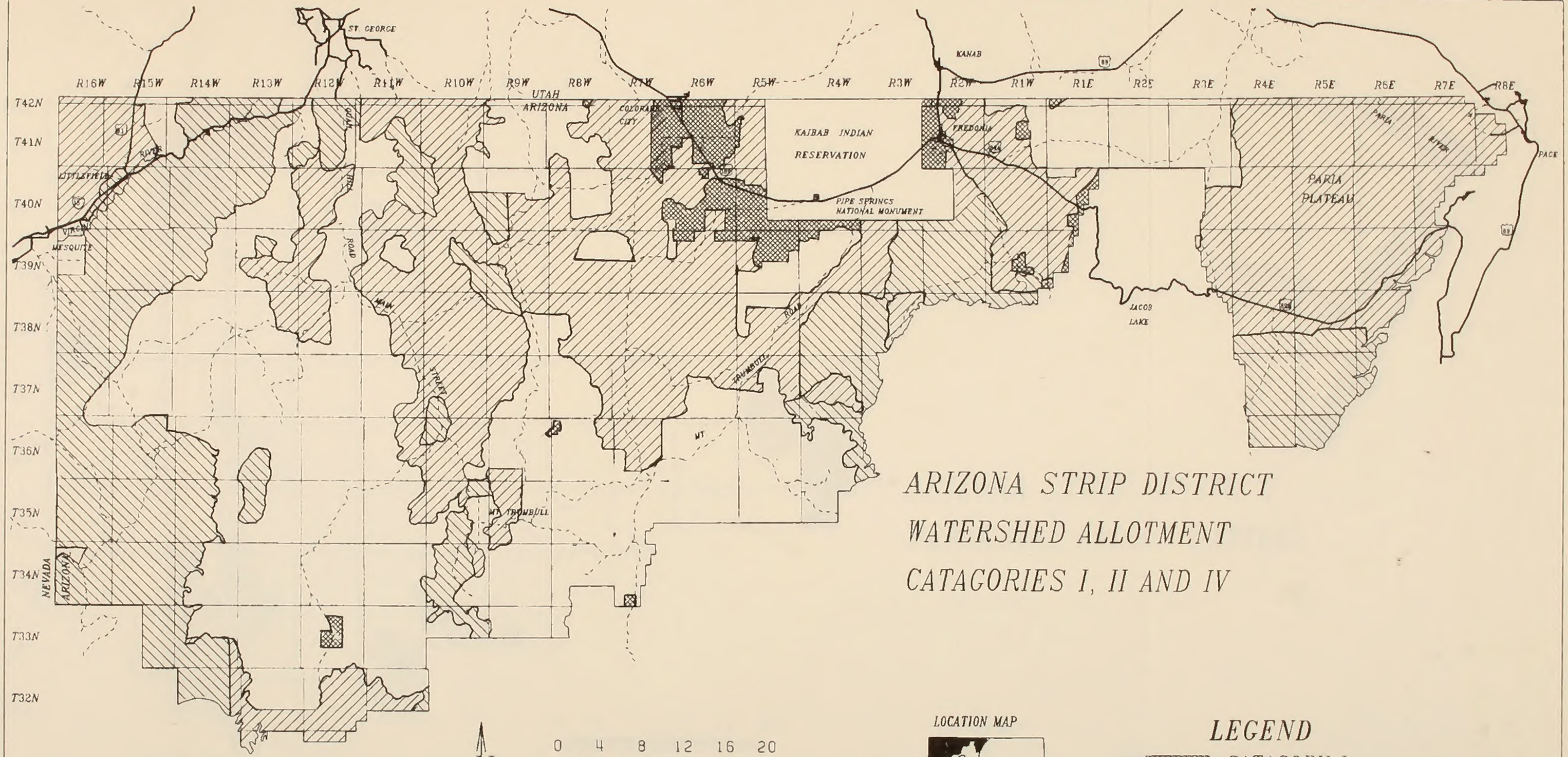




ARIZONA STRIP DISTRICT
SPECIAL MANAGEMENT AREAS

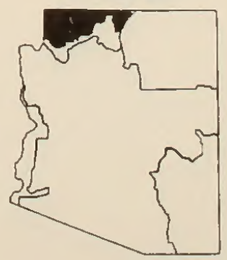
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





ARIZONA STRIP DISTRICT
WATERSHED ALLOTMENT
CATAGORIES I, II AND IV

LOCATION MAP



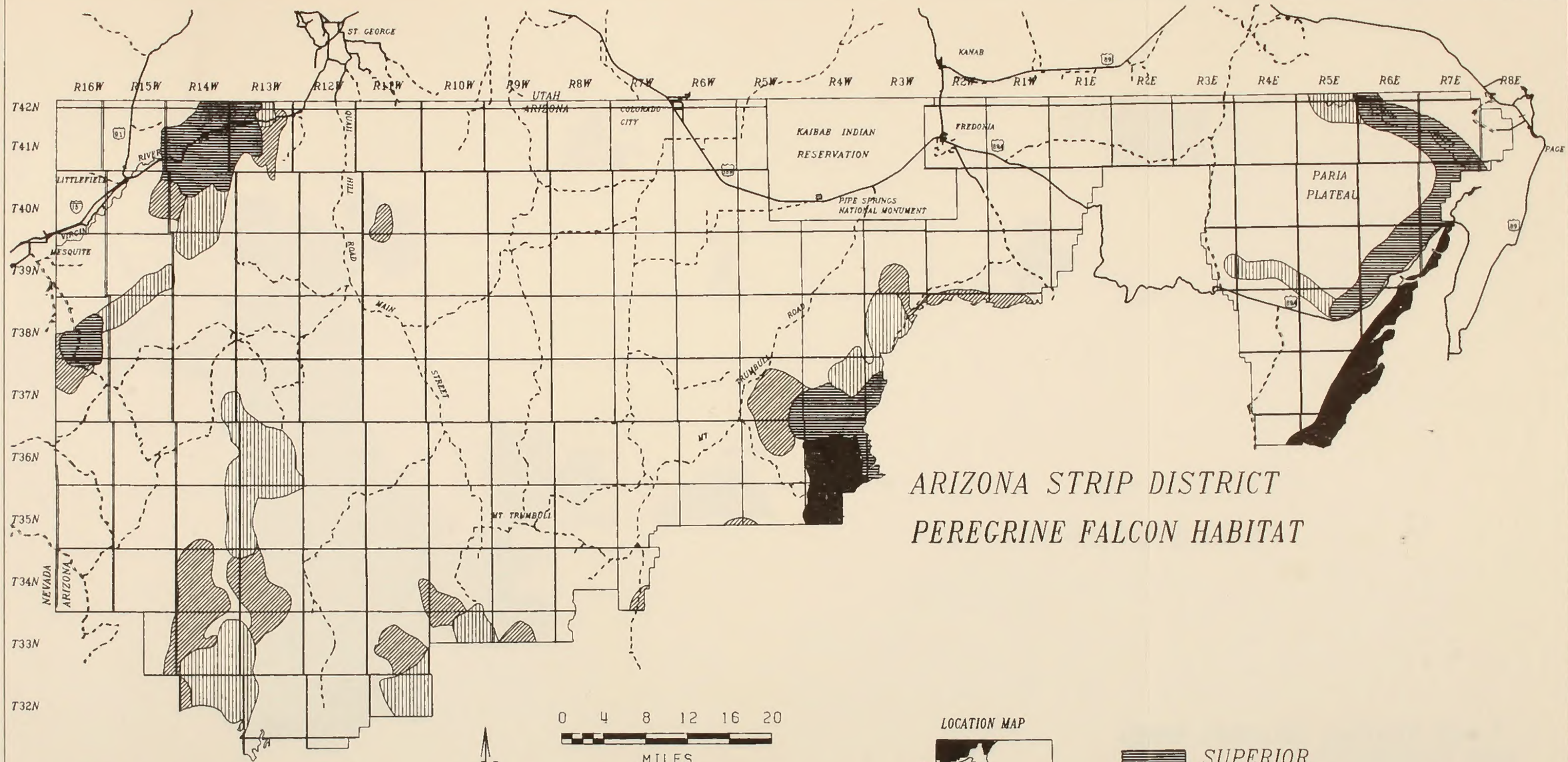
STATE OF ARIZONA

LEGEND

- CATAGORY I
- CATAGORY II
- CATAGORY IV
- UNCLASSIFIED

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



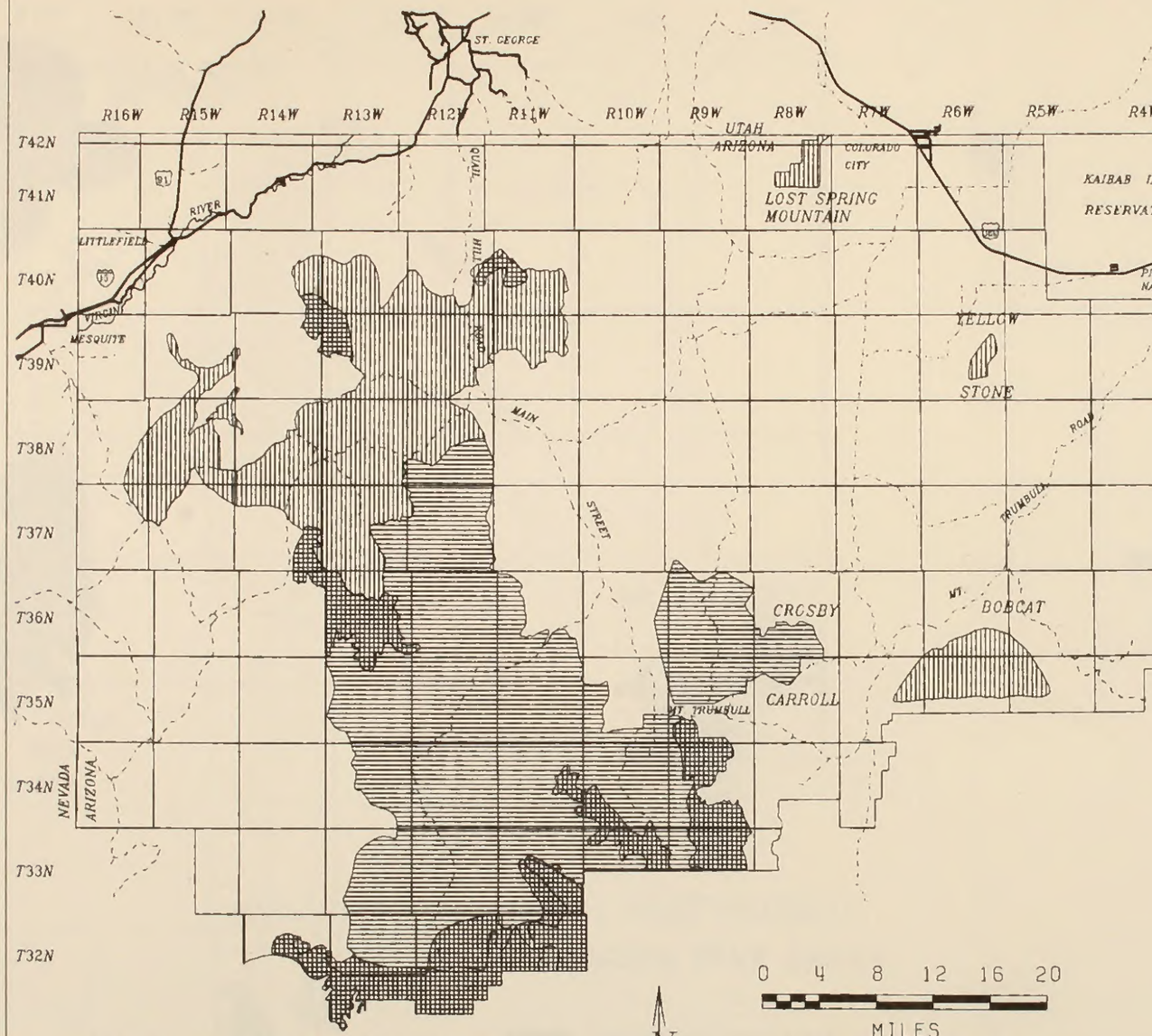


ARIZONA STRIP DISTRICT
PEREGRINE FALCON HABITAT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



ARIZONA STRIP DISTRICT
WOODLAND HARVEST AREAS

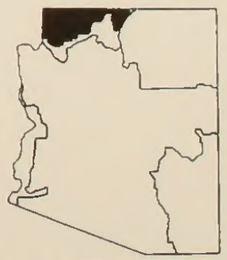


0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS

N

——— DISTRICT BOUNDARY
——— PAVED HIGHWAY
- - - - - PRIMARY UNPAVED ROAD

LOCATION MAP

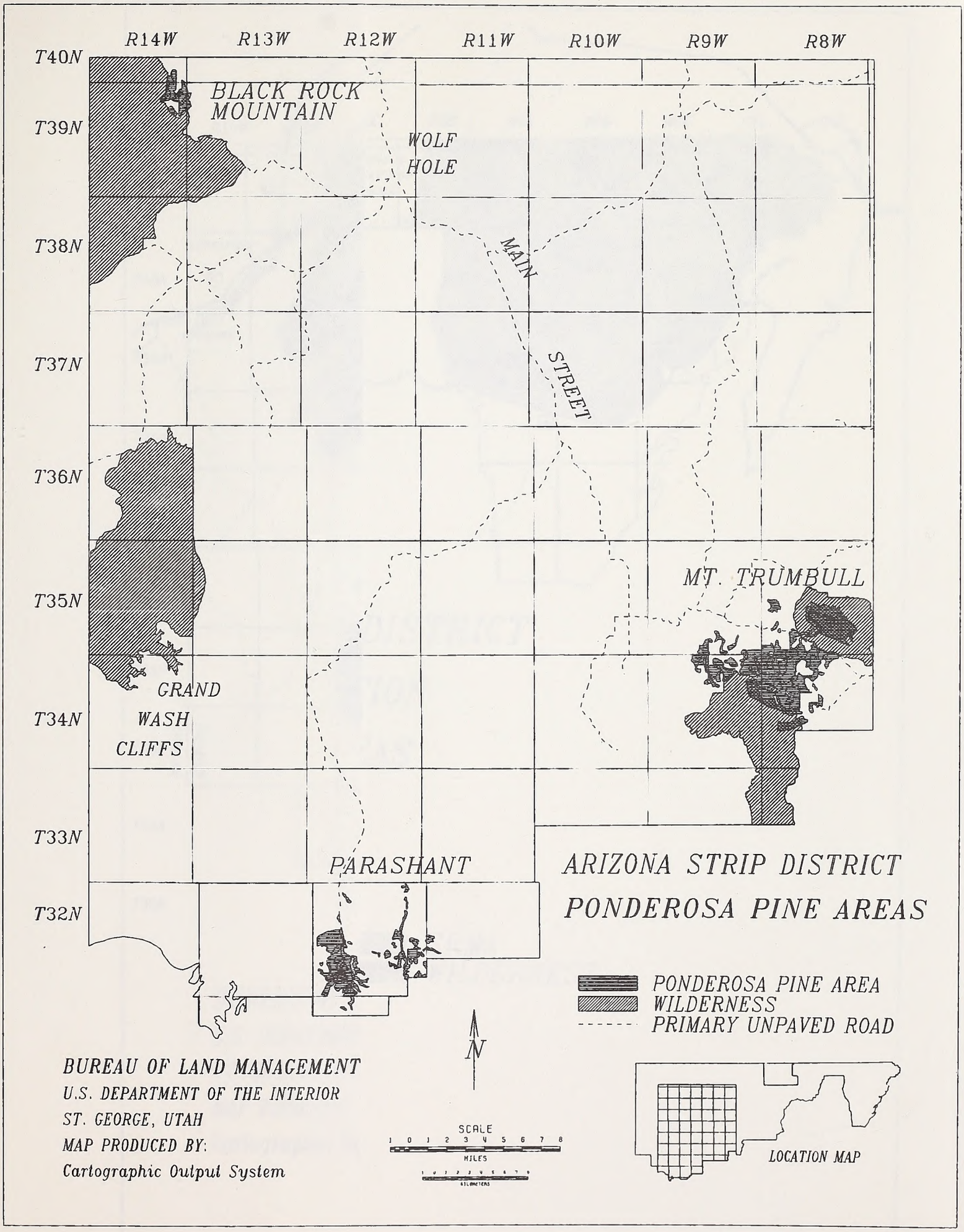


STATE OF ARIZONA

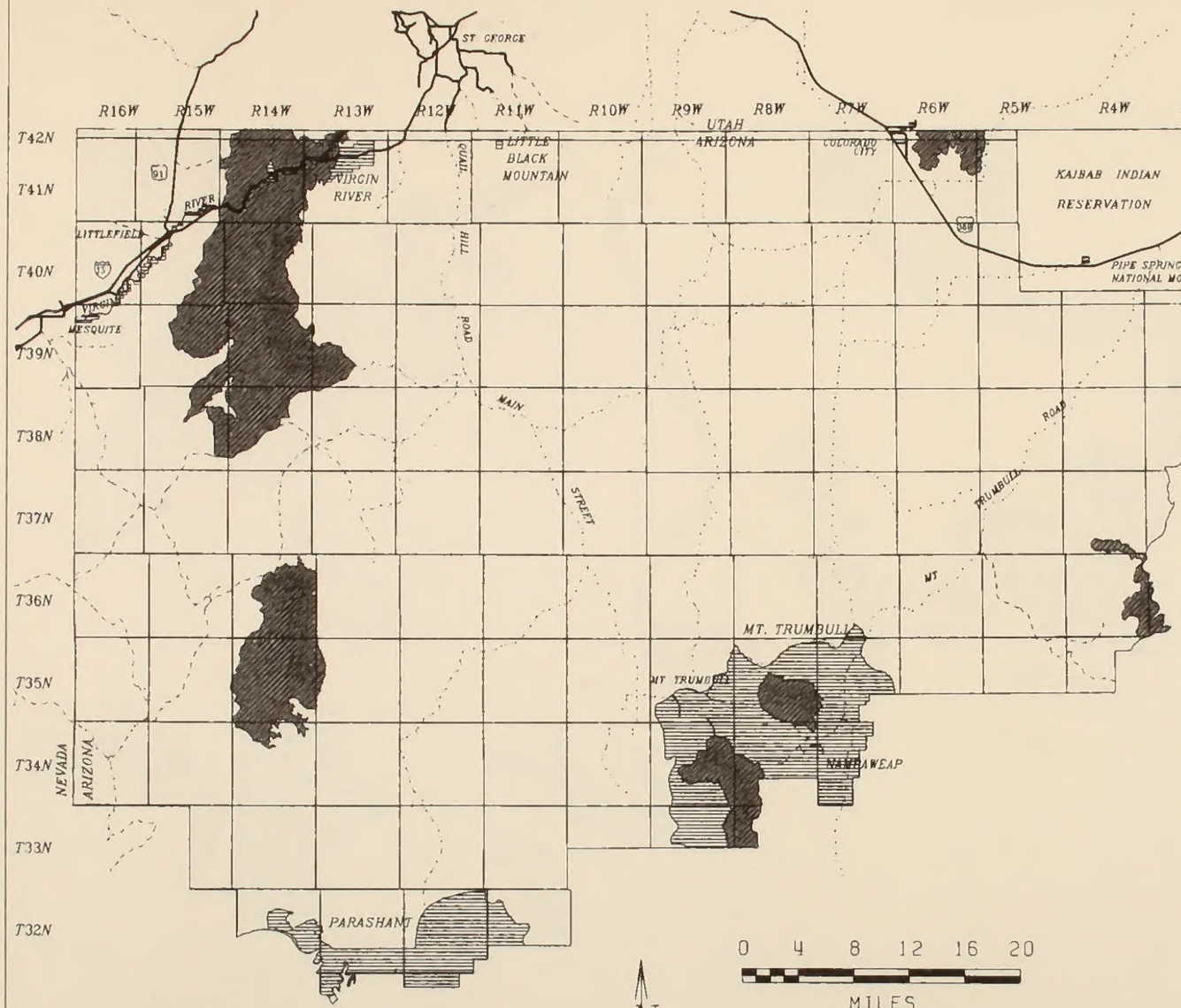
PERSONAL HARVEST AREA
PERSONAL/COMMERCIAL AREA
SPECIAL APPROVAL ONLY

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System




R14W
R13W
R12W
R11W
R10W
R9W
R8W
T40N
T39N
T38N
T37N
T36N
T35N
T34N
T33N
T32N
BLACK ROCK MOUNTAIN
WOLF HOLE
MAIN STREET
MT. TRUMBULL
GRAND WASH CLIFFS
PARASHANT
ARIZONA STRIP DISTRICT
PONDEROSA PINE AREAS
PONDEROSA PINE AREA
WILDERNESS
PRIMARY UNPAVED ROAD
N
SCALE
1 0 1 2 3 4 5 6 7 8
MILES
KILOMETERS
LOCATION MAP
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





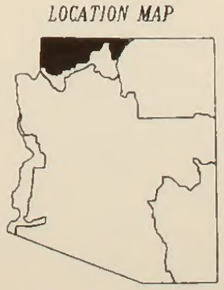
ARIZONA STRIP DISTRICT
SPECIAL RECREATION MANAGEMENT AREAS

0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS

N

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

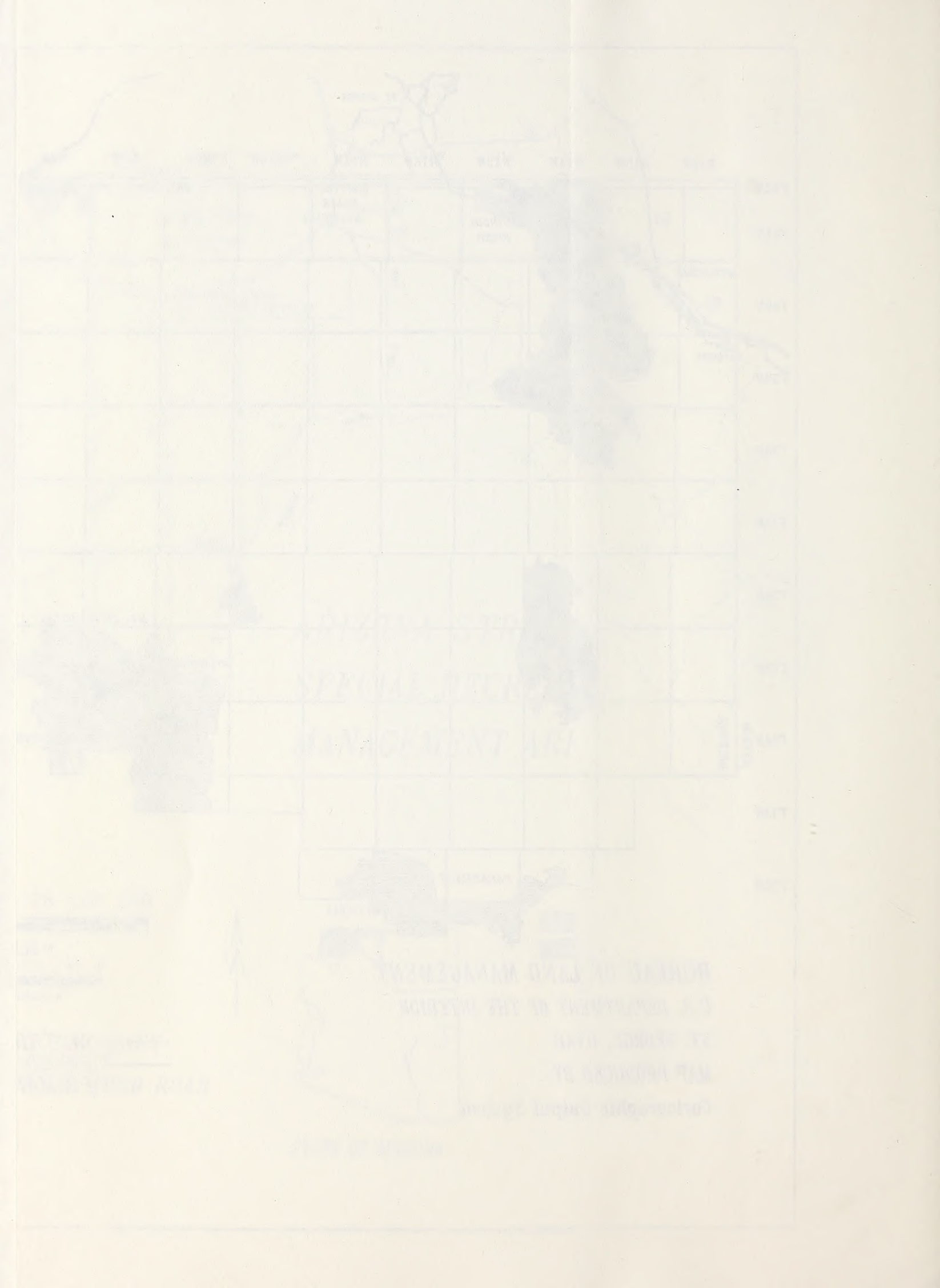
LOCATION MAP

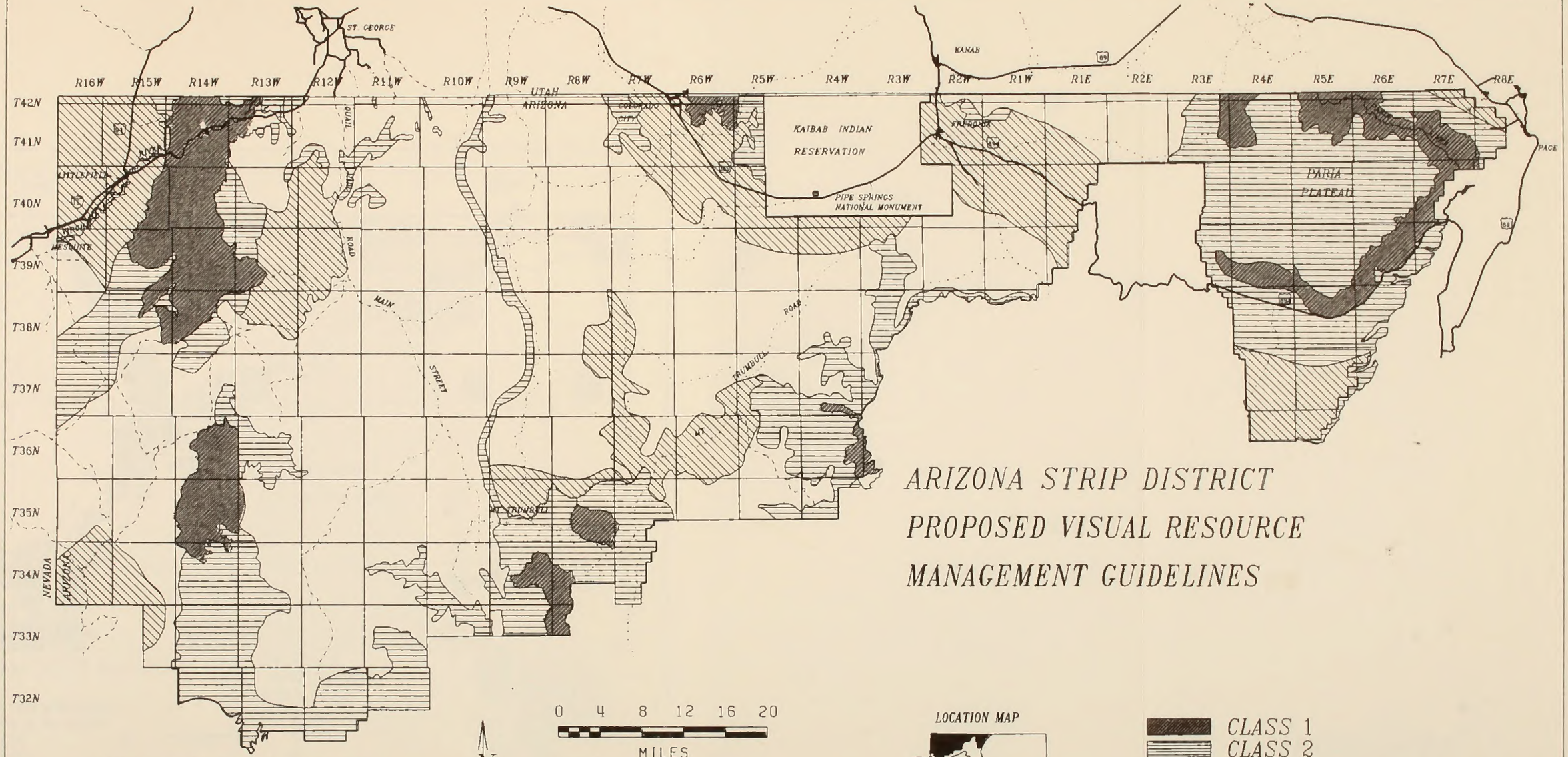


STATE OF ARIZONA

SRMA
WILDERNESS

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

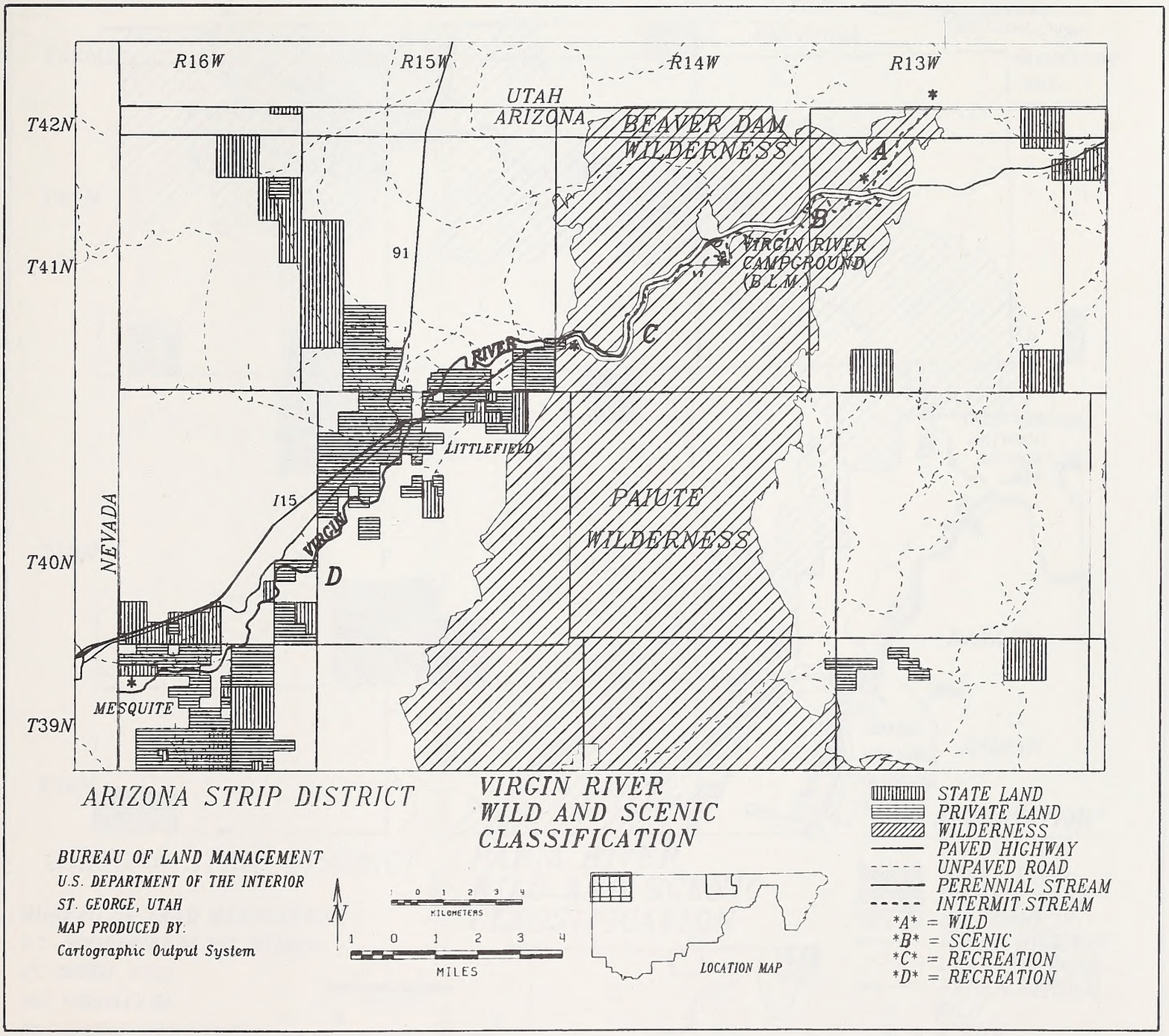




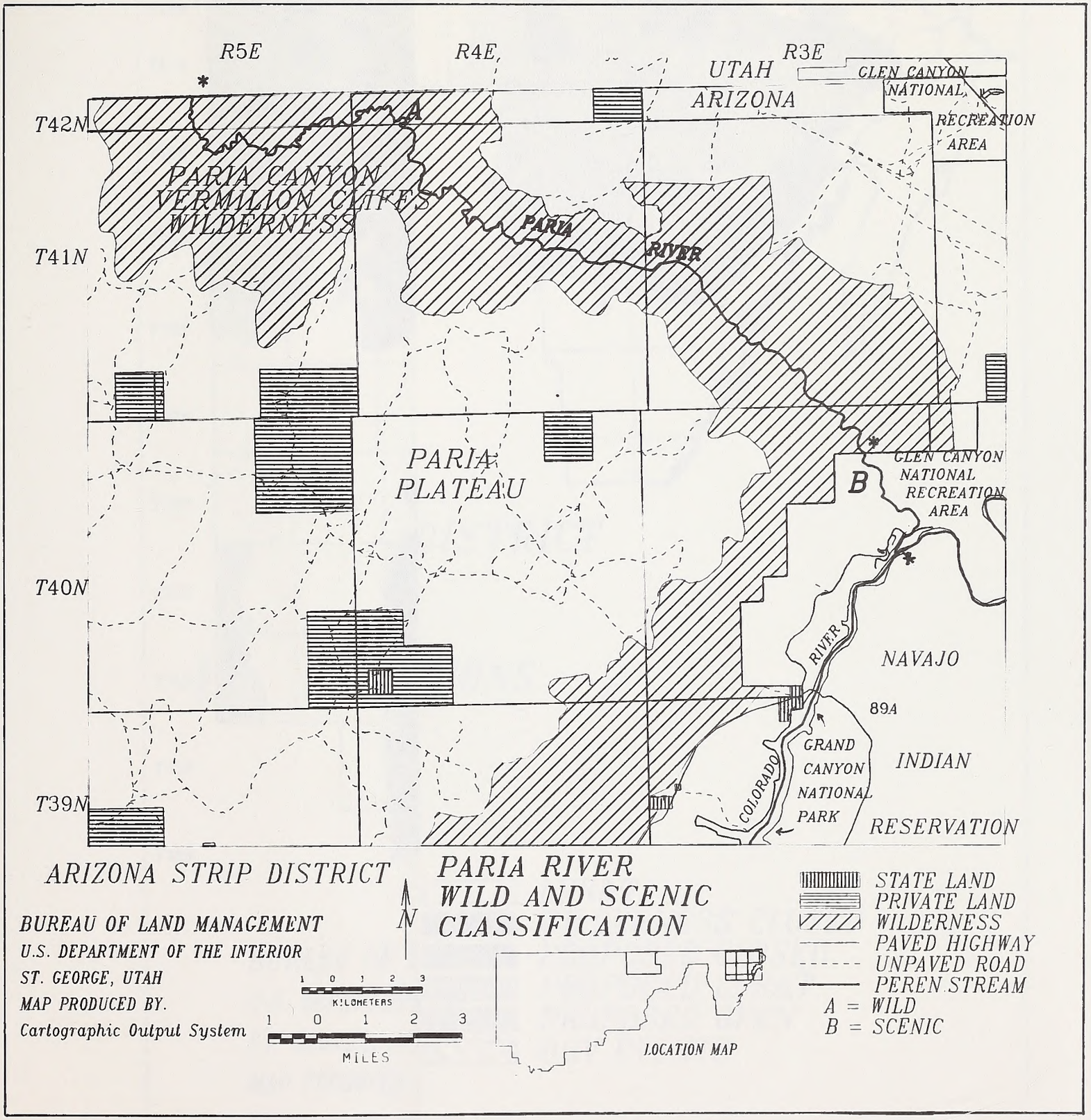
ARIZONA STRIP DISTRICT
PROPOSED VISUAL RESOURCE MANAGEMENT GUIDELINES

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

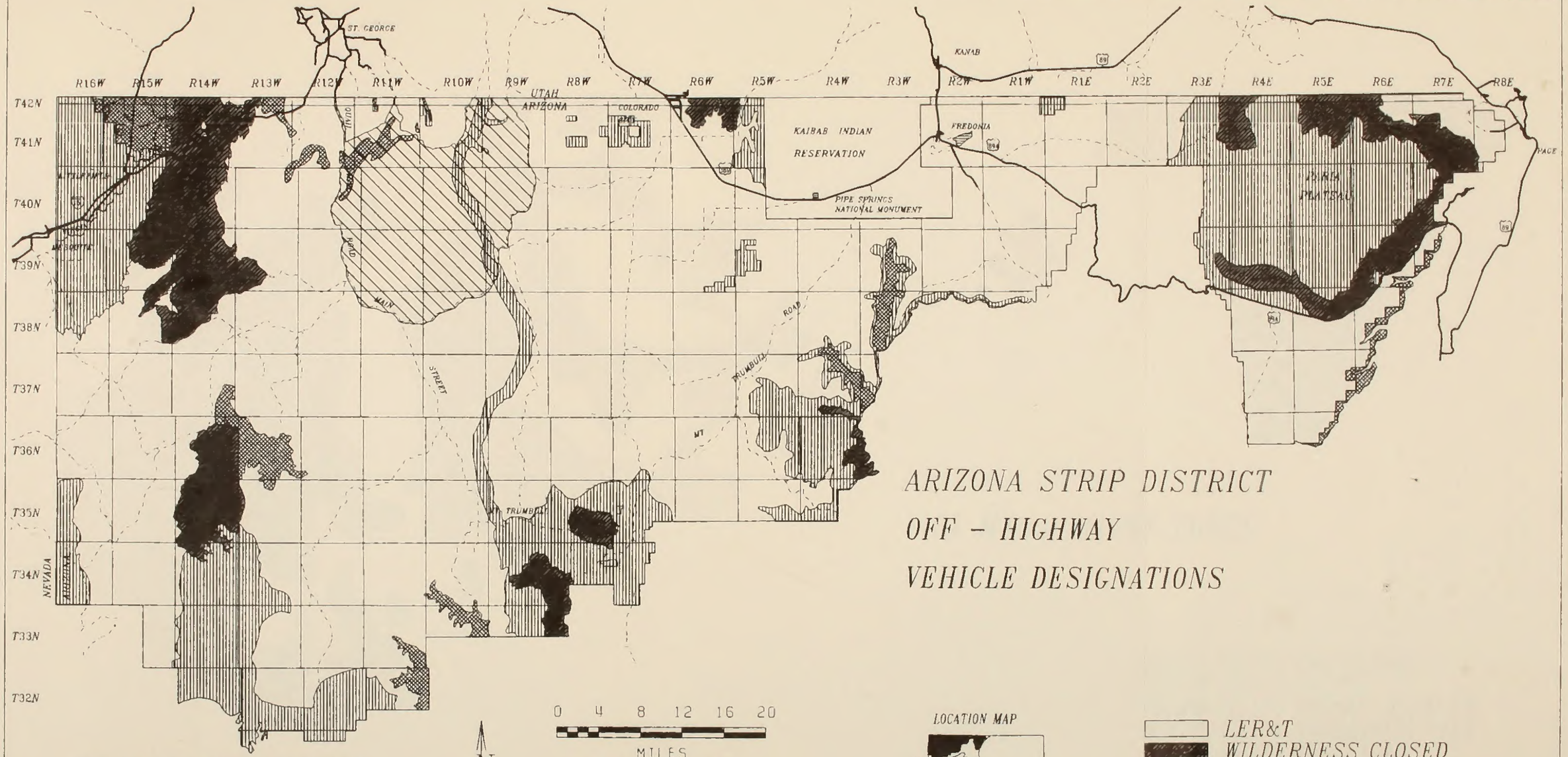



R16W
R15W
R14W
R13W
T42N
T41N
T40N
T39N
UTAH
ARIZONA
NEVADA
BEAVER DAM WILDERNESS
PAIUTE WILDERNESS
VIRGIN RIVER CAMPGROUND (B.L.M.)
LITTLEFIELD
MESQUITE
91
I15
VIRGIN RIVER
A
B
C
D
ARIZONA STRIP DISTRICT
VIRGIN RIVER WILD AND SCENIC CLASSIFICATION
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System
KILOMETERS
MILES
LOCATION MAP
STATE LAND
PRIVATE LAND
WILDERNESS
PAVED HIGHWAY
UNPAVED ROAD
PERENNIAL STREAM
INTERMIT.STREAM
A = WILD
B = SCENIC
C = RECREATION
D = RECREATION




R5E
R4E
R3E
UTAH
ARIZONA
GLEN CANYON NATIONAL RECREATION AREA
T42N
T41N
T40N
T39N
PARIA CANYON VERMILION CLIFFS WILDERNESS
A
PARIA RIVER
PARIA PLATEAU
B
GLEN CANYON NATIONAL RECREATION AREA
RIVER
NAVAJO
89A
GRAND CANYON NATIONAL PARK
COLORADO
INDIAN RESERVATION
ARIZONA STRIP DISTRICT
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY.
Cartographic Output System
N
1 0 1 2 3
KILOMETERS
1 0 1 2 3
MILES
PARIA RIVER
WILD AND SCENIC
CLASSIFICATION
LOCATION MAP
STATE LAND
PRIVATE LAND
WILDERNESS
PAVED HIGHWAY
UNPAVED ROAD
PEREN STREAM
A = WILD
B = SCENIC





ARIZONA STRIP DISTRICT

OFF – HIGHWAY

VEHICLE DESIGNATIONS

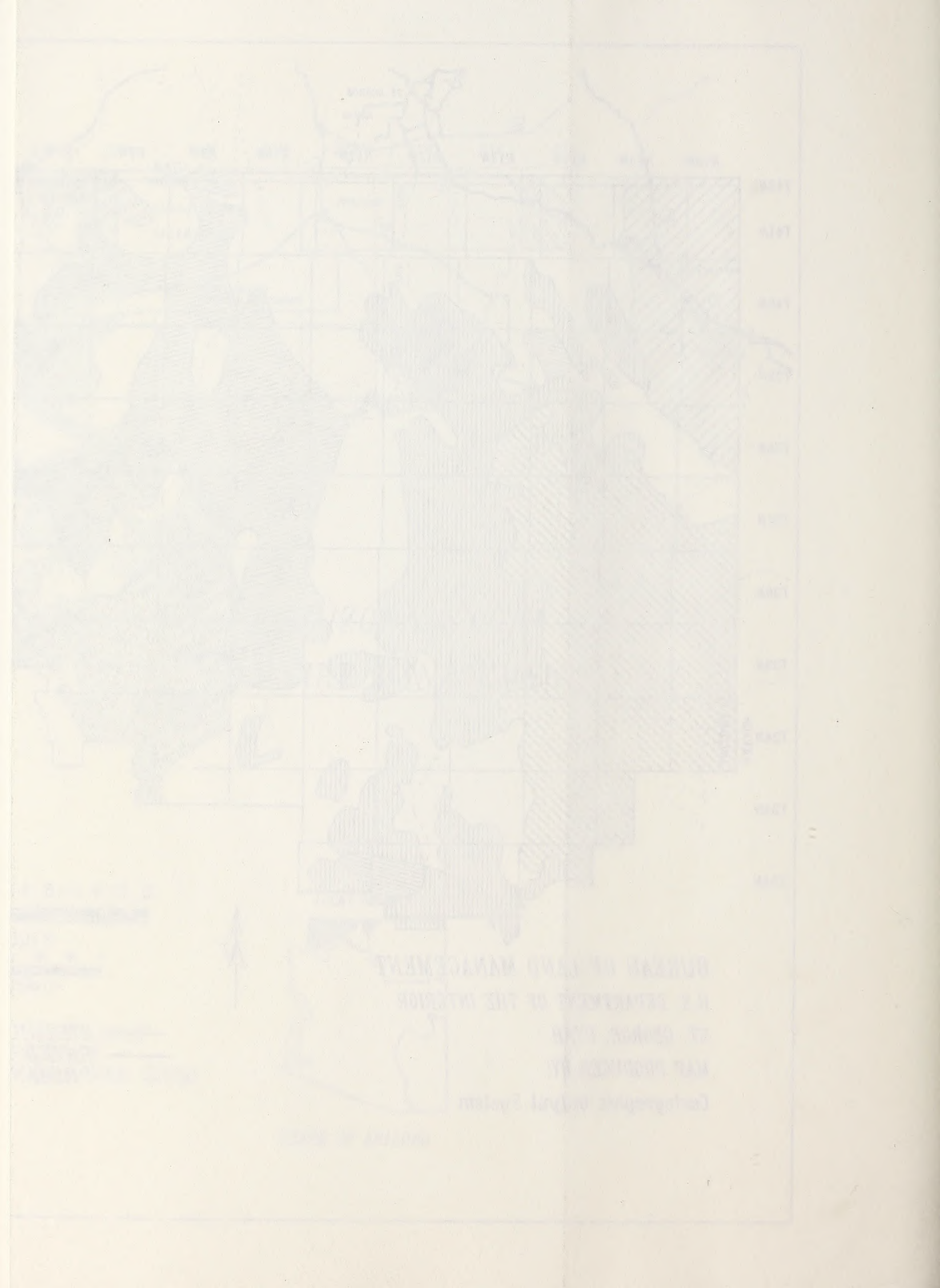
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

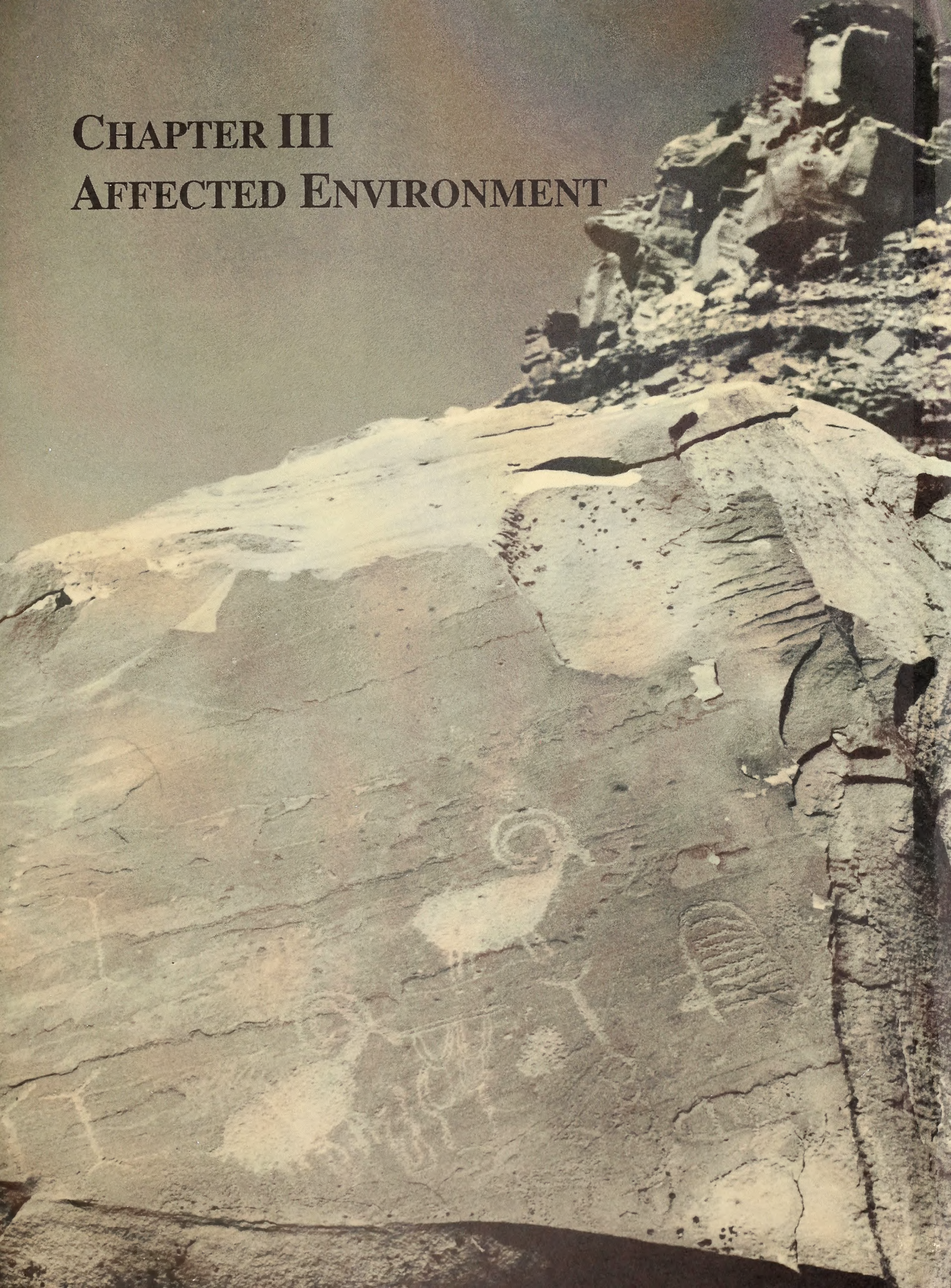




ARIZONA STRIP DISTRICT
FIRE MANAGEMENT ZONES

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





Chapter III
Affected Environment

CHAPTER III
AFFECTED ENVIRONMENT

LAND RESOURCES

The Arizona Strip District is an area separated geographically from access to the south, east, and west by the Colorado River gorge, Grand Canyon and Lake Mead. Fredonia, Colorado City and Littlefield/Beaver Dam are the only towns within the district boundaries. Page, Arizona; Kanab, Hurricane, and St. George, Utah; and Mesquite, Nevada provide most of the goods and services for those working within the district and the cultural and economic focus for the district. Residents of the Arizona Strip have closer social and economic ties to Utah and Nevada than to Arizona.

LAND OWNERSHIP

For administrative purposes, the district is divided into two resource areas known as the Shivwits and the Vermillion (Map S-1). There are 2,868,000 acres of Bureau of Land Management (BLM)-administered land on the Arizona Strip (Map S-2). The district is located in both Coconino and Mohave counties, Arizona. Table III-1 shows the acres of public land and minerals administered by BLM. Land status on the Arizona Strip District is approximately 85 percent public ownership, 10 percent state, and 5 percent private.

TABLE III-1
PUBLIC LAND ACRES
(SURFACE AND MINERAL OWNERSHIP)
BLM, ARIZONA STRIP DISTRICT

Ownership	Acres
Federal Surface	
Federal Mineral	2,814,000
State Mineral	30,200
Private Mineral	23,800
State Surface	
Federal Mineral	15,700
Private Surface	
Federal Mineral	93,700

Source: Arizona Strip District files

There are presently 393,345 acres of public land withdrawn. Some of this withdrawn land has been proposed for revocation in previous plans and additional areas are proposed for revocation in this plan (Appendix 31).

LAND AVAILABLE FOR RECREATION AND OTHER PUBLIC PURPOSES

Over the years local government entities and non-profit organizations have acquired federal land at little cost under the Recreation and Public Purposes Act of 1926 (R&PP). Either by lease or patent (deed) this land has been dedicated to use for landfills or for other uses which benefit the public at large. Table III-2 provides a breakdown of the number of acres leased or patented under the R&PP and their uses, by county.

TABLE III-2
R&PP LEASE AND PATENT ACREAGES
ON THE ARIZONA STRIP DISTRICT
BY COUNTY AND TYPE OF USE

Use	Coconino County	Mohave County
Landfill	180.0 (Lease)	30 (Lease)
Cemetery	60.4 (Patent)	10 (Patent)
College		80 (Lease)
TOTALS	240.4 Acres	120 Acres

Source: Arizona Strip District files

LAND EXCHANGES

BLM is in the process of negotiating the acquisition of 161,800 acres of Arizona state land through exchange. If acquired, these lands will be managed for multiple-use and incorporated into the management strategies of the surrounding public lands. State-selected lands used in the exchanges would come from the Phoenix District. However, all state exchanges have been suspended as the result of a ruling by the Arizona State Supreme Court that they are unconstitutional. In 1988, 13,000 acres of private land in the Parashant area were acquired through a third-party exchange. There are opportunities to further consolidate public land holdings, acquire valuable resource lands, and meet demands for potential development through land exchanges.

AIRPORTS

The district has numerous airstrips or small airport facilities, the majority of which are no longer functional. Airstrips that continue to receive use include Marble Canyon, Cliff Dwellers, Toroweap, Whitmore, Colorado City, and Pakoon. These airstrips have few facilities and are typically maintained by the predominant users.

Colorado City is proposing to expand their facilities to accommodate larger aircraft as well as a growing air traffic volume. They are planning to apply for an airport land grant.

Preliminary discussions with the City of Page, Arizona have indicated a future need for expanded airport facilities. BLM lands in Ferry Swale, northwest of Page, have been identified by the city as a tentative location for a new, enlarged facility. This site and others are currently under study by the Federal Aviation Administration to determine their suitability from an air safety standpoint.

RIGHT-OF-WAY DEVELOPMENT

BLM is responsible for authorizing rights-of-ways (R/W) on public lands. Use authorizations are made by several methods such as R/W, use permits, and leases. Land uses on public lands include roads, electrical transmission lines, telephone lines, pipelines, communication sites, electric power substations, and power distribution lines. Much of the demand for land use authorizations is related to residential and industrial development. Land authorizations are currently processed on a case-by-case basis . The authorization process involves writing an environmental assessment or environmental impact statement (EIS) if appropriate and developing resource protection stipulations prior to approval of any such use. Table III-3 shows authorized uses by resource area.

COMMUNICATION SITES

Several areas on the district have been identified as communication sites. Among these are Black Rock Mountain, Seegmiller Mountain, Mt. Logan, and Point-of-Rock. They are designed to minimize proliferation of sites in scattered areas. They provide important services to a large percentage of the population in this age of information. The chief impact is visual due to the necessary buildings and towers. These are screened by vegetation, terrain, facility design, and paint. Exceptions are towers that must be high enough to protect people and animals from high power radio transmissions. Higher towers must also be visible to aircraft and are regulated by the Federal Aviation Administration.

TABLE III-3
LAND USE AUTHORIZATIONS ON THE ARIZONA STRIP DISTRICT BY RESOURCE AREA AND TYPE OF USE

Authorized Use	Shivwits RA	Vermillion RA
Roads	6	16
Utilities R/W	5	20
Communication Sites	3	2
R&PP	2	4
Airports	1	3
Small Tract Lease	1	0
Other R/W	0	14
R/W Corridors	1	2

Source: Arizona Strip District files

RIGHT-OF-WAY CORRIDORS

Existing management framework plans (MFPs) designated one R/W corridor traversing the district east to west along the present route of the Navajo-McCullough 500 kV powerline. The corridor is two miles wide on the Shivwits Resource Area and 2,000 feet wide on the Vermillion Resource Area. The corridor provides a single route capable of accommodating multiple transmission facilities, minimizing adverse environmental impacts and reducing the need for many separate R/Ws. It also provides a specific location and planning base for companies considering R/W projects. Major transmission facility proponents are directed to this corridor as the BLM-preferred route. Full use of this corridor may be limited by the terrain and rocky conditions in the nearby Beaver Dam Mountains of Utah.

PAYMENTS IN LIEU OF TAXES

The Payment In Lieu of Taxes Act (PILT) provides money to county governments to compensate for the loss of property tax revenue on tax-exempt public lands. BLM has been delegated the responsibility of administering the PILT Through the Secretary of the Interior. The payments are designed to supplement other federal receipt-sharing funds that local governments may be receiving. Payments received under the act may be used by the recipients for any government purpose and are based on the number of acres of "entitlement land" within the county. Entitlement land consists of land administered by the National Forest Service, National Park Service, BLM, and land dedicated to the use of federal water resource development projects. Table III-4 shows payments over the past three years to each county within the district.

TABLE III-4
PAYMENTS IN LIEU OF TAXES

County	Payments $ 1985	$ 1986	$ 1987
Coconino	453,512	448,880	463,704
Mohave	971,656	960,947	988,369
TOTALS	1,425,168	1,409,827	1,452,073

Dollar figures are for all public lands in the subject counties, not just that affected by the Arizona Strip.

Source: Arizona Strip District files

The act specifically prohibits payments for tax-exempt land acquired from state or local governments, but authorizes payments for any land acquired after December 31, 1970 as additions to the National Park Service or national forest wilderness areas.

MINERAL RESOURCES

PHYSIOGRAPHY

The Arizona Strip District lies within two distinct physiographic provinces. The western third of the district, from the Grand Wash Cliffs to the Nevada border, lies in the Basin and Range province. This area is characterized by irregular surfaces, northerly trending mountain ranges, sediment-filled basins, abundant igneous and metamorphic rock exposures, extensive faulting and folding, and large exposures of Precambrian rock.

The eastern two-thirds of the district lies within the Colorado Plateau province. This area, from the Grand Wash Cliffs east to Marble Canyon, exhibits primarily sedimentary rock exposures; a regular, gently dipping surface; and elevations exceeding 1 mile with subordinate plateaus exceeding 9,000 feet. Breccia pipes, unique geologic features in this portion of the Colorado Plateau, are important for mineral development due to their potential for high grade uranium deposits (Figure III-1). Most of the significant, locatable mineral production written on the district is from these features.

MINERALS AND MINERAL POTENTIAL

The Arizona Strip District has been rated for its mineral potential (BLM, 1988) using the guidance contained in the Bureau's 3031 Manual. A summary of the rating for all mineral resources is shown on Table III-5. A description of the potential and certainty levels are given in Appendix 22. The rating given in the table indicates the highest rating for that resource within the district and does not imply that the resource has the potential for uniform occurrence throughout the district.

Oil and Gas

To date, no economic occurrences of oil or gas resources have been encountered in wells drilled on the district. However, the district has been only lightly explored for these resources with only 43 wells drilled. Most of the wells are shallow and no wells have tested rocks older than Cambrian age. Hydrocarbon shows have been reported from many of the wells drilled, primarily from rocks of Permian age, but also from rocks as old as Devonian. Only three of the wells were drilled in the Basin and Range physiographic province. Of the 40 wells drilled in the portion of the district lying in the Colorado Plateau, 21 were drilled on the Uinkaret Plateau, twelve on the Kanab Plateau, four on the Shivwits Plateau, and three on the Kaibab Plateau. Hydrocarbon shows have been reported from wells drilled on all of the plateaus.

Figure III-1. Typical Breccia Pipe Uranium Deposit

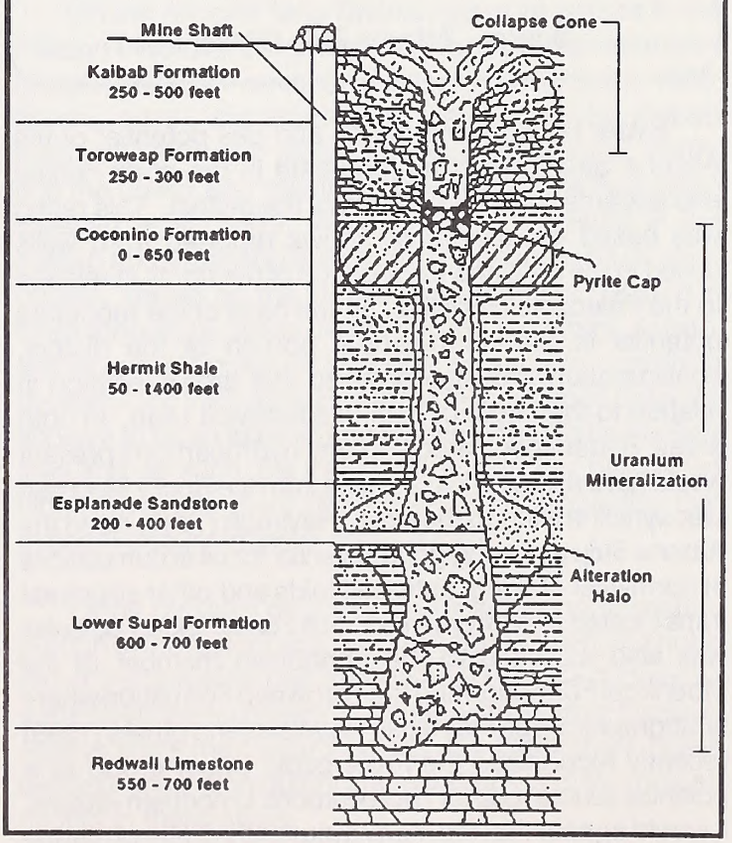


TABLE III-5
MINERAL RESOURCE POTENTIAL RATINGS

Mineral Resource	Level of Potential	Level of Certainty*
Coal	O-No Potential	D
Oil and Gas	M-Moderate	C
Geothermal	M-Moderate	B
Sodium	M-Moderate	C
Potassium	O-No Potential	C
Metallic Minerals	H-High	D
Uranium	H-High	D
Non-Metallic	H-High	D
Common Varieties	H-High	D

* See Appendix 22 for a description of certainty levels.

B-Available data provide indirect evidence to support or refute the possible existence of minerals.

C-Available data provide direct evidence but are quantitatively minimal to support or refute the possible existence of minerals.

D-Available data provide abundant direct and indirect evidence to support or refute the possible existence of minerals.

Source: Arizona Strip District files

Ryder (1983) rated the oil and gas potential of the Arizona Strip District as moderate in the north-central and extreme western portions of the district. This rating was based on several oil shows reported from wells drilled in the area and the location of the tracts in relation to the Paleozoic hingeline. In the case of the moderate potential in the north-central portion of the district, consideration was also given to that area's location in relation to the Virgin oil field in southwest Utah. In both areas, Ryder speculated that any hydrocarbons present would have migrated into the area from the Rocky Mountain Geosyncline lying to the west. Heylmun (1987) rated the Arizona Strip as having good potential for oil accumulations in northwest-striking, anticlinal folds and other structural traps located away from major fault zones. Good potential was also assigned to the Shnabkaib member of the Moenkopi Formation and the Toroweap Formation where stratigraphic traps may exist. Reynolds and others (1988) recently recognized the Proterozoic Chuar group as a potential source rock for hydrocarbons in northern Arizona. It would appear that the many thousands of feet of marine sediment that lie in and immediately adjacent to the Arizona Strip District to the west could provide at least a moderate potential for the origination and possible migration of hydrocarbons into the area.

Based on the above information, the district has been rated as to oil and gas potential (Map III-1). Oil and gas accumulations which could underlie the district probably occur in structural or stratigraphic traps within rocks of upper Proterozoic through upper Paleozoic ages. The certainty of oil and gas in this area is supported by direct evidence in the form of oil and gas shows in wells. However, the evidence is too small to support or refute the existence of a valuable resource. Tertiary and Holocene erosion along the major drainages crossing the district would tend to lower the potential for the preservation of hydrocarbon accumulations due to probable groundwater flushing. Thus, most of the southern and eastern portion of the district is rated as having low potential. Only indirect evidence indicates a possibility that oil and gas may not exist.

Geothermal

Extensive exploration for geothermal resources in the district has not occurred, though warm springs and wells occur in the area. Geothermal resources exposed in the area are of very low temperature and not presently usable for purposes other than space heating. The potential for using geothermal resources is low given the sparse population of the Arizona Strip.

Sodium

Sodium deposits have been reported from the Muddy Creek Formation near Mesquite, Nevada and is contained within small isolated playa deposits. Though information of a quantitative nature is lacking, this area has been classified as potentially valuable for sodium (Map III-2). Other than reconnaissance work, no exploration or development of the sodium resource has occurred.

METALLIC MINERALS

Potentially favorable environments for the occurrence of metallic minerals in the Arizona Strip include carbonate-hosted gold, placer gold, and breccia pipe-related precious and base metal deposits, possibly containing rare earth elements.

Carbonate-hosted gold shows a moderate potential for occurrence in the Virgin Mountains. Gold mineralization in the area would be of the bulk-tonnage, low-grade type described by Berger (1986) and Fisher and Juilland

(1986). Mineralization would be associated with normal, thrust, and possibly detachment faults in the area. Small deposits and anomalies of tungsten, copper, silver, arsenic, molybdenum, lead, and zinc have been identified in the area (Villalobos and Ham, 1981). These elements are either pathfinder elements or occur in small deposits in the vicinity of gold mineralization (Berger, 1986).

Placer gold deposits reportedly occur along the lower western slope of the Beaver Dam and Virgin Mountains. Mineralization reportedly ranges from 0.05 to 0.07 grams per tonne and occurs in alluvial gravels along Beaver Dam Wash. Exploration for gold deposits is taking place immediately north of the Arizona Strip District in Utah (Spooner, 1988). Based on the geologic environment, the inferred geologic processes, and reported occurrence of gold, the alluvial material along Beaver Dam Wash shows a moderate potential for the occurrence of gold. Gold exploration is occurring although development potential is speculative.

Breccia pipe-related precious and base metal deposits occur along the lower Grand Wash Cliffs and Virgin Mountains. These deposits reportedly contain copper (up to 23 percent), silver (up to 10 ounces per ton), and relatively minor amounts of lead, zinc, uranium, and gold (Keith and others, 1983). Germanium and Gallium occur in the Apex deposit in Utah (Bernstein, 1986). These elements could occur in breccia pipes along the lower Grand Wash Cliffs and Virgin Mountains. Based on the geologic environment, inferred geologic processes, abundant direct and indirect evidence, and mines in the areas, they have been rated as having a high potential for the occurrence of metallic mineral resources (Map III-3).

Uranium

Exploration and development of uranium resources are currently the most active mineral-related operations in the district. There is currently one mine in production, two in various stages of development, two undergoing reclamation and three that have been closed and reclaimed. These mines lie in breccia pipes (Figure III-1) found north and west of the Kanab Creek drainage. Reclaimed mines have responded very well to reclamation efforts undertaken.

Breccia pipes in the Arizona Strip originate in Redwall Limestone and form collapse features in overlying rocks as recent as the Chinle Formation. Uranium mineralization occurs in the Supai through Toroweap formations (Krewedl and Carisey, 1986). Eight deposits of uranium, presently economical to develop, have been identified by Energy Fuels Nuclear in the Kanab Creek area. These deposits are almost exclusively uranium-bearing, though other metals are known to exist. Active exploration programs have been undertaken by several companies in search of additional deposits on the Arizona Strip.

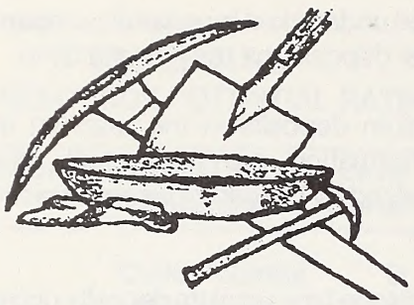
Uranium deposits in the uranium member of the Chinle Formation are in ancient stream channels characterized by the carbonaceous trash typical of such deposits.

Sandstone-type uranium deposits occur in the Petrified Forest and Shinarump members of the Chinle Formation. These deposits typically occur in medium to coarse grained sandstones and conglomerates deposited along ancient stream channels. Uranium mineralization is associated with carbonaceous material contained within the sandstone and conglomerates. Uranium was produced from deposits in the 1950s (Keith et al., 1983; Scarborough, 1981; Baillieu and Zollinger, 1980). Vermillion Cliffs deposits yielded 1,524 tons of uranium ore averaging 0.201 percent U308 between 1954 and 1957 (Scarborough, 1981). These deposits are located within the present-day Vermillion Cliffs Wilderness Area. Uranium was also produced from the Rainbow Hills mining district, though no production figures are available. Based on geologic environments, inferred geologic processes, and numerous mines in these areas, they have been rated as having high potential for the occurrence of uranium resources (Map III-4). This rating is supported by abundant direct and indirect evidence.

Gypsum

On the Arizona Strip District, gypsum occurs in the Pakoon Dolomite, Seligman, and Woods Ranch members of the Toroweap Formation (Nielson, 1986; Hintze, 1986; Moore, 1972), the Harrisburg member of the Kaibab Formation (Nielson, 1986; Cheevers and Rawson, 1979); and the Lower Red member of the Moenkopi Formation (Stewart et al., 1972; Wilson, 1962). Gypsum in the Kaibab and Moenkopi formations appears to be of good quality. Based on the known occurrence of gypsum in these formations, areas overlain by the Toroweap, Kaibab, and Moenkopi formations are highly favorable for containing gypsum. The thick gypsum deposit in the Pakoon Dolomite appears to be an isolated occurrence in the Cedar Pockets area and, as such, the Pakoon Dolomite has been rated highly favorable there (Map III-2). The probability that gypsum occurs in these areas is high.

Large gypsum deposits occur in the northwestern portion of the district around Black Rock Gulch, the north end of the Sunshine Trail, and in Cedar Pockets. Operators are actively mining in two locations, with another inactive. Assays show the Cedar Pockets and Black Rock Gulch deposits show high quality and good potential for gypsum mining in these areas.



Sand and Gravel

In the western portion of the district, gravel is abundant along the lower slopes of the Virgin and Beaver Dam mountains. Here alluvial fans have formed and the gravel is expected to be unsorted but of good quality. Well sorted, good quality gravel is also expected in and along stream terraces which have formed along both the Beaver Dam Wash and the Virgin River. Based on the surface exposures found here, these areas appear highly favorable for good quality gravel (Map III-5).

Sand and gravel resources are relatively scarce in the central portion of the Arizona Strip District. Large deposits are confined to isolated exposures of gravel in the lower portions of the Moenkopi Formation. Both Cedar Knoll and Little Cedar Knoll are examples of this type of deposit. These deposits, though few, contain significant quantities of good quality gravel. The remainder of the central portion of the district is relatively gravel-poor. Small deposits of good quality gravel occur in exposures of the Shinarump member of the Chinle Formation, deposits formed along the western flank of the Hurricane fault zone and Quaternary-aged ephemeral stream channels cut into the Kaibab Formation. Gravel deposits within the Shinarump member may be cemented and drilling and blasting or ripping may be required to develop the gravel resources in some areas. Gravel along the Hurricane fault zone is composed primarily of limestone and may be found virtually anywhere along the western escarpment of the fault zone. Gravel occuring in Quaternary stream channel deposits would probably be confined to relatively narrow zones, about 75 feet wide. Based on known occurrences in these environments, gravel probably occurs in the area (Map III-5).

In the extreme eastern portion of the district, gravel is relatively scarce. Exposures of good quality gravel do, however, occur along the eastern flank of the Kaibab monocline. Here gravel formed in alluvial fans and ephemeral stream channels at the mouths of canyons emanating from the Kaibab Plateau. The gravel resource is relatively unsorted with sizes ranging from boulders to sand. In addition to these resources, the potential exists for the occurrence of gravel resources in the Chinle Formation (Map III-5).

SUMMARY OF PAST ACTIVITY

Leasable Mineral Resources

The only leasable mineral resources explored for in the district are oil and gas. These are the only leasable minerals likely to be explored for or developed over the life of the plan and are, therefore, the only mineral resources discussed.

About 43 oil and gas exploration wells have been drilled in the Arizona Strip beginning with the first well in 1909. None of these wells have produced oil or gas in paying quantities, though oil and gas shows have been reported from a majority of the wells. Disturbance caused by each well, including access, typically ranges between five and ten acres. Assuming an average of eight acres disturbed per well, approximately 345 acres have been disturbed because of oil and gas exploration.

Typical well drilling operations last up to four months, though deeper wells may take longer. Since no oil or gas has been produced from this area, all disturbances have been reclaimed immediately following exploration. Complete reclamation of the disturbance requires from five to ten years.

Locatable Minerals

Within the district, locatable minerals being explored and developed include those contained in breccia pipes (primarily uranium). Exploration and production of other minerals such as gold and uncommon varieties of stone are occurring and are expected to continue through the life of this plan. Map III-6 shows areas within the district where large claim blocks have been located and active mines presently exist. The size, configuration, and location of these claimed areas is constantly changing due to mining claim abandonment and new claim location. Map III-7 shows the location of mines and exploration sites submitted under 43 CFR 3809 regulations since 1980.

Complete rehabilitation of a disturbance generally requires from five to ten years. After a BLM site inspection determines a site to be completely rehabilitated, the operator and claimant are released from further obligation for reclamation of that site. A site is determined by the BLM to be completely rehabilitated when vegetation on the disturbed site is equal in density and variety to vegetation in the surrounding undisturbed area. In addition, the site must be adequately contoured and all foreign debris removed. New roads constructed for exploration and mining purposes are shown on Map III-8. When these roads are no longer needed, they will be reclaimed.

The following is a summary of past locatable mineral exploration and development activity by commodity:

Uranium:

From January 1980 through September 1988, 528 notices or plans have been submitted for uranium exploration or development activities on the district. Table III-6 summarizes these activities by fiscal year (October 1 through September 30).

Of 528 cases submitted, 384 (73 percent) resulted in actual surface disturbance. Exploration activities consist of drilling, trenching, and temporary access. Those sites not yet reclaimed include ongoing exploration and sites where future reentry is planned. Currently there are five mines in various phases of development, all within the Vermillion Resource Area. These mines have disturbed 139 acres. The three Hack Canyon mines, developed from two surface facilities and 5.6 miles of upgraded access (37.8 acres disturbed) were closed and fully reclaimed in 1988. The remaining mine sites will be reclaimed immediately following depletion of the ore body. On the average, 17 acres are disturbed per mine site, totaling 766 acres of surface disturbance to 1990. Reclamation generally begins immediately or soon after the operator determines that no further exploration is warranted or production has been completed.

Gypsum:

Since the surface management regulations became effective, 20 cases have been submitted for gypsum exploration and development. These cases include both notices and plans. Only 45 percent of the submitted cases resulted in actual surface disturbance. Of the nine sites disturbed, none have completed reclamation. Seven of the sites have ongoing exploration or development. On the remaining two, steps are being taken to assure reclamation. Table III-7 summarizes these activities by fiscal year.

Other Minerals:

Since the surface management regulations became effective, nine cases have been submitted for the exploration and development of other locatable minerals on the district. These cases include both notices and plans. Table III-8 summarizes these activities by fiscal year.

Of eight cases with surface disturbance, two were for uncommon varieties of stone, five were for other minerals including gold, and one was for a water tank associated with uranium exploration. The half-acre unreclaimed case has exploration activities still being conducted on it.





CULTURAL RESOURCES

Cultural resources occur over the Arizona Strip in patterns of densely occupied areas and widely scattered sites. Due to the vast areas and widespread nature of these resources, only significant sites are discussed.

Cultural resources on the Arizona Strip District developed from centuries of human occupation which has been divided into five time periods: Paleoindian (9500-7000 B.C.), Archaic (7000-300 B.C.), Formative (300 B.C.-A.D. 1200), Neo-Archaic (A.D. 1200-1540), and Historic (1540-Present) (Altschul and Fairley, 1989). The Formative is by far the best represented period on the district. Recorded sites from the Archaic and Neo-Archaic periods are poorly represented, often a result of their subtle appearance or lack of diagnostic artifacts. Formative period sites are found districtwide, while Neo-Archaic sites are more prevalent in the western portion. Sites classified as base and temporary camps have no structural remains but contain artifacts and features indicating short-term occupation. Limited activity sites include artifact scatters (lithic scatter, sherd scatter, groundstone scatters or a combination of these), isolated features (e.g., roasting pit, hearth, rock art, granary/cist, trail, burial), and specialized activity sites (e.g., quarries, agricultural features, shrines). Sites classified as "unknown" are those for which not enough information was known to assign them to a particular type. This data is from Class III inventories completed on approximately 2 percent of the Arizona Strip District acreage.

VANDALISM

Vandalism of cultural properties is an ongoing problem. It includes a wide range of impacts such as defacement of rock art, dismantling of historic cabins, collecting arrowheads and other artifacts from the surface of prehistoric sites, and premeditated theft for commercial or personal purposes. In the past, archaeologists have not always documented vandalism when recording sites, which makes it difficult to determine the extent of the problem.

Even with these limitations, records indicate that where a source of site disturbance is documented, 12.7 percent of site impacts are identified as vandalism (Altshul and Fairly, 1989). This number is significantly higher in certain geographical areas and for specific site types.

TABLE III-6
URANIUM EXPLORATION / DEVELOPMENT ACTIVITIES ON THE ARIZONA STRIP DISTRICT

Activity	Fiscal Year 1980	1981	1982	1983	1984	1985	1986	1987	1988	Total
Exploration										
# of cases submitted	5	57	86	47	82	26	68	87	70	528
# of cases w/activity	5	47	58	34	51	22	52	62	53	384
% cases w/activity	100	82	67	72	62	85	76	71	76	73
# of known drill holes	48	149	269	121	272	35	170	107	40	1,211
# of cases w/drill holes	5	43	49	23	40	11	29	26	11	237
# of holes/case	9.6	3.5	5.5	5.3	6.8	3.2	5.9	4.1	3.6	5.1
# acres disturbed	6.5	33.9	57.2	39.4	62.8	24.8	60.5	72.4	57.6	415.1
# acres reclaimed	6.5	29.7	44.1	38.5	54.0	18.9	50.5	44.6	44.2	331
% acres reclaimed	100	88	77	98	86	76	83	62	77	80
Avg. acres disturbed/case	1.3	.72	.99	1.2	1.2	1.2	1.2	1.4	1.1	1.1
Development										
Mine name		Hack	Pige		K.N.		Pine	Herm	AZ 1	
Mine yard acres		21.7	40.0		17.7		20.8	23.6	19.4	143.2
Upgraded access acres (from 10' to 35' W)		16.1	30.3		19.7		51.5	0	0	117.6
New access acres (35' W)		0	0		8.5		2.1	5.1	0.1	15.8
Total access acres		16.1	30.3		28.2		53.6	5.1	0.1	133.4
Powerline		17.6	17.0		9.7		10.1	0	0	54.4
Total # acres disturbed		55.4	87.3		75.3		84.5	28.7	19.5	350.7
Total # acres reclaimed		37.8	0		0		0	0	0	37.8
Total										
Acres disturbed	6.5	89.3	144.5	39.4	138.1	24.8	145	101.1	77.1	765.8
Acres reclaimed	6.5	67.5	44.1	38.5	54	18.9	50.5	44.6	44.2	368.8
% acres reclaimed	100	80	31	98	39	76	35	44	57	48
Avg. acres disturbed/case	1.3	1.9	2.5	1.2	2.7	1.2	2.8	1.6	1.5	2.0

Source: Arizona Strip District files

TABLE III-7
GYPSUM EXPLORATION / DEVELOPMENT ACTIVITIES ON THE ARIZONA STRIP DISTRICT

Activity	Fiscal Year 1981	1982	1983	1984	1985	1986	1987	1988	TOTAL
# Cases Submitted	2	0	1	3	3	7	3	1	20
# Cases with Activity	2	-	0	2	1	3	0	1	9
% Cases with Activity	100	-	0	67	33	43	0	100	45
Acres Disturbed	7	-	0	8	1	11	0	1	28
Acres Reclaimed	0	-	-	0	0	0	-	0	0
% Acres Reclaimed	0	-	-	0	0	0	-	0	0
Avg. Acres Disturbed/Case	3.5	-	-	4.0	1.0	3.7	-	0.5	3.1

Source: Arizona Strip District files

TABLE III-8
OTHER MINERALS EXPLORATION / DEVELOPMENT ACTIVITIES ON THE ARIZONA STRIP DISTRICT

Activity	Fiscal Year 1981	1982	1983	1984	1985	1986	1987	1988	TOTAL
# Cases Submitted	1	2	0	1	1	0	0	4	9
# Cases with Activity	1	2	-	1	1	-	-	3	8
% Cases with Activity	100	100	-	100	100	-	-	75	89
Acres Disturbed	0.1	0.5	-	0.1	0.1	-	-	0.4	1.2
Acres Reclaimed	0	0.5	-	0.1	0.1	-	-	0	0.7
% Acres Reclaimed	0	100	-	100	100	-	-	0	58
Avg. Acres Disturbed/Case	0.1	0.3	-	0.1	0.1	-	-	0.1	0.2

Source: Arizona Strip District files

IMPORTANT PREHISTORIC CULTURAL RESOURCE AREAS

While the Arizona Strip is known to have many cultural resources some areas contain particularly high concentrations of cultural properties. The areas described below are recognized as priority areas, but other areas within the district have been recognized for their cultural significance.

The Paria Canyon and Plateau contain virtually the entire spectrum of site types and features known to occur in the northern southwest, including pithouses, surface masonry features, habitation structures, granaries, storage cists, hearths, lithic scatters, open campsites, rock art, rock shelters, and trails. Over 500 sites have been recorded in this area to date, of which many are large and impressive. The area holds great potential for answering important research questions.

Moonshine Ridge is an area which offers an abundance of sites representing varying ages of past human occupancy. The area has a pinyon-juniper woodland cover varying from scattered to closed canopy. The footslopes of the mesa are one of the potential sources of water. The pinyon-juniper covered ridges surround broad valleys of potential horticultural land. The area has had random sampling surveys as well as approximately 400 acres of Class III surveys conducted by students of Brigham Young University (BYU) in the summer of 1987. This area has a potential for answering important research questions. Observation has established the Johnson Spring and Lost Spring Mountain areas as having rich cultural resources, much like Moonshine Ridge. In addition, Lost Spring Mountain has a high frequency of rock shelter and surface masonry features and rock art.

Mt. Trumbull and the Uinkaret Plateau have seen thousands of years of human activity due to the abundance of game animals, wild plant food, water, fertile soils and timber. Humans occupied the area by 2600 B.C., as evidenced by the split twig figurines found in nearby canyon rockshelters. By about A.D. 1, evidence of horticulture appears as Anasazi occupation of the Uinkaret Mountains appears in the form of both small and large habitation sites and rock art. The Uinkaret Mountains also offer signs of Paiute occupation through ceramics found in association with several Anasazi pueblo sites. Much is still to be learned about the human occupancy of the Uinkaret Mountains. Only a few thousand acres are currently inventoried. This area has potential for answering many important research questions for both the public lands and those administered by the Grand Canyon National Park. This area has two significant rock art sites, Witch Pool and Nampaweap. Nampaweap is an extensive petroglyph site and Witch Pool has petroglyphs and some pictographs possibly dating from the era of the John Wesley Powell Expedition.

The Virgin River Corridor has a high density of various prehistoric sites. Many have been vandalized; however, they still contain enough remains to provide valuable scientific information. Little Black Mountain is a petroglyph site found south of St. George, Utah on the state line, a short distance from the Virgin River. The Virgin and Beaver Dam mountains are predicted to have medium site density, mainly seasonal campsites of all cultures. The Wolf Hole, Black Rock and Poverty mountains are predicted to have both small habitation sites and campsites. Exploitive (hunting, gathering) sites in medium densities should be found on the benches of the Shivwits and Sanup Plateaus. Seasonal hunting and gathering sites in low densities are predicted in the Grand Wash areas. The heads of all the canyons leading to the Grand Canyon, and where canyon floors are influenced by flood (agriculture) zones, are all predicted to have high densities of prehistoric cultural sites. Varying levels of inventory are beginning to confirm the predictions.

HISTORIC SITES

The Honeymoon and Temple Trails are of great historical significance. The point of origin for both trails is the Church of Jesus Christ of Latter-Day Saints (LDS) Temple in St. George, Utah. The history of the trails is entwined with different aspects of the LDS religion.

The Temple Trail connects St. George to the old sawmill sites on Mt. Trumbull. The sawmills and trail were built in 1872 to transport lumber to the temple, 80 miles to the northeast in St. George. The Temple Trail goes east from St. George to Fort Pierce, then up a dugway built through the Hurricane Cliffs. At the top, the trail runs south to Mt. Trumbull.

The Honeymoon Trail, built in 1872, also originates from the St. George Temple and runs east along the same route as the Temple Trail until cresting the Hurricane Cliffs near Antelope Spring. There, the Honeymoon Trail turns east to Lee's Ferry on the Colorado River, 130 miles from St. George.

Other trails through the Arizona Strip include the Dominguez & Escalante (D&E) Trail of 1776, Jedediah Smith's Trail along the Virgin River, the Old Spanish Trail, and other minor trails. Many of these minor trails followed established Indian trails, but they are not marked, since their exact location is not known.

Antelope Cave on the Uinkaret Plateau was listed on the National Register of Historic Places (NRHP) in 1975. Two historic trails and two archaeological districts on the Arizona Strip have been nominated and determined eligible for listing on the NRHP in 1976. These are the Paria Plateau Archaeological District (70,000 acres and 416 sites), Mt. Trumbull Archaeological District (18,250 acres and 72 sites), and the Temple and Honeymoon trails. Many other recorded archaeological sites are known to be potentially eligible for nomination to the NRHP.



VEGETATION

The Arizona Strip District RMP area is made up of several vegetation types (Map III-9). Table III-9 describes each vegetation type, district percentage covered by the type, associated species, typical elevation of occurrence, and average annual precipitation. Appendix 2 presents a discussion on vegetation trend relative to grazing management and climate.

At present, BLM is conducting ecological site mapping and descriptions. This information will be used to determine objectives for managing vegetation for various management units (watersheds, grazing allotments, ACECs, etc.). Ecological site inventory information will be useful in identifying desirable plant communities. Management of the various activities that affect vegetation will then be guided toward meeting the objectives.

TABLE III-9
VEGETATION TYPES ON THE ARIZONA STRIP DISTRICT

Type	% Of District (Federal)	Associated Species (Common Name)	Elevation (feet)	Annual Precip. (inches)
Pinyon-Juniper	25	Pinyon, juniper, sagebrush, cliffrose, blue grama, galleta grass, Indian ricegrass, squirreltail, ring muhly	4500-8000	10-20
Grassland	22	Blue grama, galleta grass, squirreltail, Indian ricegrass, crested wheatgrass, Russian wildrye	4000-5000	5-12
Desert Shrub	19	Blackbrush, shadscale, ephedra, buckwheats, wolfberry, yucca	2500-5000	5-12
Sagebrush	17	Big sagebrush, sandsage, fringed sage, black sagebrush, Bigelow sage, ephedra, cliffrose, fourwing saltbush, Junegrass, blue grama, galleta grass, western wheatgrass, squirreltail	3000-8000	8-16
Saltbush	5	Fourwing saltbush, blue grama, galleta grass, sacaton, shadscale	3000-6000	5-12
Half Shrub	3	Snakeweed, blue grama, galleta grass, shadscale	3000-6000	5-12
Creosote Bush	3	Creosote, bursage, range ratany, big galleta, yucca	2500-4000	5-10
Mountain Shrub	1	Oak, serviceberry, mountain mahogany, bluegrasses	5000-8000	15-25
Blackbrush	1	Blackbrush, snakeweed, range ratany, ephedra, yucca, Indian ricegrass, galleta		
Riparian	1	Cottonwood, willow, tamarisk, rushes, sedges		
Shadscale	1	Shadscale, galleta grass, blue grama, fourwing saltbush	3000-4500	5-10
Conifer	1	Ponderosa pine, cliffrose, bitterbrush, sagebrush, Arizona fescue, blue grama	6000-8000	15-25
Annuals	1	Cheatgrass, Russian thistle	4000-6000	5-12

Source: Arizona Strip District files

WATERSHED RESOURCES

During the 1970s, the Arizona Strip District carried out the Phase I Watershed Conservation and Development Inventory (WC&DI). From this inventory erosion condition classes were determined districtwide by transects, using the Soil Surface Factor (SSF) method (Appendix 23 and Map III-10). Table III-10 summarizes this data.

TABLE III-10
EROSION CONDITION CLASSES (FEDERAL ACRES) ON THE ARIZONA STRIP DISTRICT

Stable	Slight	Moderate	Critical	Severe	Total
1%	37%	54%	7%	1%	100%

Source: Arizona Strip District files

The district also used a method developed by the Pacific Southwest Inter-Agency Committee (PSIAC) to estimate sediment yield from large areas. Each allotment was transected in several areas and an average sediment yield was calculated for each allotment and listed in both the Vermillion and Shivwits Grazing EISs.

From the late 1970s to the present, the Soil Conservation Service has been conducting an Order III Rangeland Soil Survey for the district. The survey has been completed on the Vermillion Resource Area and is currently being conducted on the Shivwits Resource Area. Complete and draft data are available at the district and area offices.

BLM has used the SSF and PSIAC information along with soil survey information, vegetation inventories and professional experience to evaluate the watershed condition for each allotment written on the district. This evaluation considered current erosion conditions, erosion hazards and the soil moisture/temperature regime. To facilitate management, watershed conditions were evaluated on grazing allotment boundaries rather than watershed boundaries. However, when actual watershed management recommendations are made they will be made by soil type or geomorphologic position.

Watershed condition has been evaluated on each grazing allotment in the district. Each allotment was then placed in one of the four categories described in Table III-11. Over 36 percent of the district is in Category IV, unsatisfactory erosion condition, but soils would be responsive to treatment.

TABLE III-11
WATERSHED CATEGORIZATIONS ON THE ARIZONA STRIP DISTRICT

Category	Description	Federal, State, & Private Acreage in the RMP Area
I	Watershed units in satisfactory erosion condition and not especially susceptible to wind and water erosion.	808,000
II	Watershed units in satisfactory erosion condition, but susceptible to wind and water erosio following disturbance.	1,226,000
III	Watershed units in unsatisfactory erosion condition and unresponsive to treatment because of the soil temperature / moisture regime.	0
IV	Watershed units in unsatisfactory erosion condition but responsive to treatment.	1,188,000

Source: Arizona Strip District files

Allotments were categorized to identify existing or potential problem areas and set priorities for watershed rehabilitation work and more intensive management. Map II-7 shows watershed category areas and Appendix 11 lists allotments in each category.

Watersheds in either Category I or II are currently in satisfactory or better erosion condition. These watersheds are now functioning properly.

Soil salinity was a classification criterion in this categorization. The relationship between erosion condition, salinity and sediment yield was implied. A highly eroded saline watershed will carry more salt downstream. This becomes important in planning management for erosion-prone watersheds or allotments (Map III-11).

The district has two watershed activity plans. The Fort Pierce Community Watershed Plan addresses the Fort Pierce drainage basin, extending into Hurricane, Mainstreet, and Clayhole valleys. The Upper Langs Run Watershed Plan addresses the area north and west of Mt. Logan.

In addition to these activity plans, several other watershed activity plan needs have been identified: Fort Pierce Wash, Hobble Canyon, Johnson Run, Wolf Hole Valley, Upper Bull Rush Wash, and Lower Hurricane Valley. These watershed areas have been identified as having the most severe watershed conditions. Due to funding constraints and other priorities, they have not yet been written. There is also one paired plot erosion study going on in Hidden Hills. This study is measuring the soil loss from the same soil type, one plot under grazing and one not being grazed. Once this data is collected it can be used with the Universal Soil Loss Equation (USLE) for comparative analysis and transfer.

WATER RESOURCES

The district has been conducting water source inventories since the early 1980s. This inventory included field surveys of stockponds, springs, seeps, potholes, playas, wells, and perennial stream systems. For the most part, the field inventory is complete. However, much of the data still requires incorporation into the Bureau's water data management system. There are approximately 880 stockponds, 350 springs and seeps, 3 playets, 6 potholes, and 70 wells. The district has three perennial streams that are longer than one-half mile: Kanab Creek, Virgin River, and the Paria River. Most of the springs flow less than a few hundred feet and have been developed for livestock, wildlife, recreation, and/or administrative use. Spring flow is generally three to five gallons/minute. The regional groundwater table is deep, generally greater than 2,500 feet below the surface in the Redwall/Muav limestone contact. There are a few small perched groundwater tables that have been developed, but little is known about their extent. Their source of recharge is thought to be from runoff in local, usually dry washes.

Most of the district is composed of a network of ephemeral washes which only run in direct relationship to the amount of rainfall. Fall and winter storms are usually gentle, and summer rainstorms are usually of short duration, but often intense. The present drainage pattern is generally a function of these intense summer storms.

WATER QUALITY

BLM's management objective for water quality is to ensure that all waters on public lands meet or exceed federal and state water quality standards for specific uses. These standards typically include sediment loads, turbidity, pH, trace metals, total dissolved solids (TDS), and bacterial levels.

Groundwater quality information is not abundant throughout the district. Groundwater quality varies widely throughout the district depending on the type of aquifer and geologic formation from which it originates.

Water quality data has been collected for many of the springs located within the district. Generally these have been tested for TDS and used to indicate mineral concentration and palatability for livestock consumption. TDS levels normally increase with the distance from the recharge area and are less intensive in the more permeable aquifers. The water that is derived from Navajo sandstone is generally very good and meets state drinking water standards. Groundwater from shallow aquifers is generally high in TDS and alkalinity and generally does not meet state drinking water standards although it is considered acceptable for livestock and wildlife use.

The district has several sources of water quality and quantity information on the three perennial streams within the district. Paria has a USGS stream gauge in the Lee's Ferry area. The National Park Service, BLM, and the Arizona Game and Fish Department have data on water quality, fisheries, and aquatics. Kanab Creek has a USGS stream gauge in Utah and several years of very comprehensive water quality data on six separate sites. This data has been gathered by Energy Fuels Nuclear as part of their baseline studies for their mining program. The Virgin River has water quality and flow data gathered by the City of St. George in Utah, a USGS stream gauge, and various levels of water quality data gathered by the Fish and Wildlife Service.

In 1988, Arizona Department of Environmental Quality (ADEQ) prepared a Water Quality Assessment and a Non-Point Source Assessment Report (SAR), the latter of which was approved by EPA on August 28, 1989. The SAR provides the following information:

- Over 90 percent of Arizona's waters are not meeting designated beneficial uses required by state water quality standards due to impacts from non-point sources.

- The most significant categories of non-point sources adversely affecting Arizona's waters, by stream miles, are grazing, hydrologic/habitat modification, recreation and resource extraction.



AIR RESOURCE

All the airsheds within the district are managed as Class II by Prevention of Significant Deterioration (PSD) regulations as mandated by the National Ambient Air Quality Standards (NAAQS) as defined in the Clean Air Act. There are no designated non-attainment areas on the district. The bordering land managed by the National Park Service is managed as Class I.

Fugitive dust emissions and smog from large metropolitan areas are the main source of pollution on the district. Dust is generated by the erosive force of winds blowing across the desert, coming from disturbed areas generally associated with road systems. Fugitive dust is excluded from the evaluation of air quality. Smog is blown in from metropolitan areas southwest of the district (Los Angeles, Las Vegas, and Phoenix). Point-source emissions come from the burning of landfills at Mesquite, Littlefield and Colorado City. They cause localized air pollution due to the release of toxic particles and gases from burning.

Air quality is not being measured on a full-time basis. The Salt River Project has been conducting air quality and visibility studies in the area for a number of years. They currently have a time lapse camera located on Mt. Trumbull. Table III-12 shows some 1-year evaluations made on the district plus some full-time, state-station data.

TABLE III-12
AIR POLLUTANT ANNUAL AVERAGES AND MAXIMUM SHORT-TERM CONCENTRATIONS MEASURED BY REGION

Pollutants	Averaging Time	Measured Concentrations in Micrograms/m3 or RPM (noted)						
		State Sites						EFNI Site
		1975	1983		1986			1983-1984
		Warner Valley	Page a/	Grand Canyon	Page d/	Grand Canyon	Glen Canyon Dam e/	Top
S02	Annual	-	6	- c/	-	-	7	-
	24-hour	0.05	92	-	-	-	32	-
	3-hour	0.25	324	-	-	-	112	-
TSP	Annual b/	-	41	5	35	10	14	14
	24-hour	32	141	58	131	31	39	59
N02	Annual	.00009 ppm	8	-	-	-	6	-
CO	8-hour	-	-	-	-	-	-	-
	1-hour	-	-	-	-	-	-	-
03	1-hour	-	137	137	-	-	0.10 ppm	-

a/ Page concentrations measured by Salt River Project Instrumentation
b/ Geometric
c/ "--" means no data available
d/ Average between Salt River Project and State Instrumentation
e/ Glen Canyon Dam by Salt River Project Instrumentation

Refer to the Shivwits and Vermillion MSAs for more information about air quality.

SOURCES: Arizona Bureau of Air Quality Control (ABAQC) (1984), Energy Fuels Nuclear, Inc. (EFNI) (1984), Allen-Warner Valley Project (1975), Dames and Moore EA (1986), Arizona Department of Environmental Quality (1986)

SPECIAL STATUS SPECIES

The Bureau's responsibility to manage endangered species is set forth in the Endangered Species Act. FLPMA states in part:

> The congress declares that it is the policy of the United States that management be on the basis of multiple use and sustained yield unless otherwise specified by law. In this case, the Endangered Species Act has precedent over our multiple use mandate. The ESA requires that the Bureau does not authorize, fund or conduct any activity that threatens the continued existence of the desert tortoise.

The ESA also states:

> All other federal agencies shall, "...utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species..."

Bureau Manual 1622,Supplemental Program Guidance for Renewable Resources, provides guidance on priority species which include fish, wildlife, and plant species and habitats having special significance for management.

The species addressed in the following appendices are priority species. Habitats described and shown on appropriate maps are priority habitats.

(1) Appendix 12 addresses state special status animals and plants that occur or could occur in the RMP area;

(2) Appendix 13 addresses federally listed and candidate plant and animal special status species;

(3) Appendix 24 provides additional information about Category 2 candidate species; and

(4) Appendix 25 provides additional information about special status animals and sensitive wildlife species associated with riparian areas.

SPECIAL STATUS PLANT SPECIES (MAP III-12 AND APPENDIX 26)

Brady Pincushion Cactus
(Pediocactus bradyi)
Federally listed: Endangered

Brady pincushion cactus was listed in 1979 because prospecting, mining, livestock, plant collecting, and OHVs threatened the population. BLM administers about 10,700 acres of known habitat for this species.

The habitat of this species is on the rims of the plateaus along the Colorado River in House Rock Valley. BLM has several plots established where about 600 cactus are tagged to determine the effects of the above threats to the population. The FWS developed a recovery plan and BLM developed an HMP for the species.

Siler Pincushion Cactus
(Pediocactus sileri)
Federally listed: Endangered

This plant was also listed in 1979 as endangered. Prospecting, mining, livestock, plant collecting, and OHVs were identified as possible threats.

The Siler pincushion cactus occurs on 330,000 acres scattered near the Arizona-Utah border. The eastern edge of the species' potential habitat occurs near Fredonia in Coconino County, Arizona across to its western boundary just southwest of St. George, Utah. It is much more widespread than believed at the time of listing.

The Siler pincushion cactus appears to be strongly related to the Shnabkaib member of the Moenkopi Formation and is found exclusively on gypsiferous clay to sandy soils. The cactus is sometimes found on nearly identical members of the Kaibab Formation. These soils are high in soluble salts.

This plant is also being studied to determine the population trend, level of threats and their impact on the biology of the plants. The FWS developed a recovery plan and BLM developed an HMP for this species.

Welsh's milkweed
(Asclepias welshii)
Federally listed: Threatened

A milkweed found in the dunes at Coyote Buttes, within a wilderness area, may be *Asclepias welshii*. Specimens have been sent to university herbariums for positive identification. Inventory of adjacent sand dunes within two miles of this population revealed no milkweed.

Fickeisen Pincushion Cactus
(Pediocactus peeblesianus* var. *fickeiseniae)
Category 1

Arizona State University's Botany faculty is currently carrying out chromosome studies to determine if this variety is different from *peeblesianus* var. *peeblesianus*.

Bristly Plains Cactus
(Pediocactus paradinei)
Category 1

This cactus occurs mostly in the Kaibab National Forest which has ongoing studies on this plant. It is also found in House Rock and Coyote valleys. BLM protects this cactus from land use activities through clearance and conservation efforts as required by NEPA.

SPECIAL STATUS ANIMAL SPECIES

Woundfin Minnow
(Plagopterus argentissimus)
Federally listed: Endangered

The woundfin minnow was placed on the federal endangered species list by the FWS on October 13, 1970 because of its elimination from all streams in its native range except the Virgin River. Woundfin range from LaVerkin Springs on the mainstream of the Virgin River and the lower portion of LaVerkin Creek in Utah downstream to Mesquite, Nevada. Twelve miles of habitat occur on the Arizona Strip managed Virgin River. The confluence of the Virgin River with Beaver Dam Wash is the most productive woundfin habitat in Arizona. Habitat requirements of woundfin are not well known, but their distribution indicates a preference for swift, shallow, stream runs with sandy bottoms and turbid waters. The woundfin population appears in much more serious condition than any other species in the Virgin River.

The 1989 Quail Creek flood appears to have substantially altered the Virgin River ecosystem. Although this is probably temporary, it could have substantial effects on the habitat for this fish species and others.

A major threat to all Virgin River endemic fishes is the red shiner which is an introduced bait fish that has migrated into the Virgin River from Lake Mead. The shiner intensively competes for resources and, prior to the Quail Creek flood, seriously depleted the sensitive species populations. A red shiner control effort was conducted in 1988 with inconclusive results.

Virgin River Chub
(Gila robusta seminuda)
Proposed for Federal listing: Threatened
State-listed: Endangered

The Virgin River chub is listed by the FWS as a threatened species and its habitat is proposed for listing as critical. The AGFD lists the chub as an endangered species, which means extinction throughout the state is highly probable if no recovery efforts are made. Like the woundfin minnow, the Virgin River chub is also restricted to the Virgin River below LaVerkin, Utah. However, the chub ranges downstream to Lake Mead.

The chub population has decreased drastically in the past 100 years and appears to be in danger of extinction. The prime factor in their decline could be related to the reduced flow of the Virgin River caused by diversion for off-stream uses.

Virgin River Spinedace
(Lepiodomeda mollispinis mollispinis)
Candidate for Federal listing;
State-listed: Endangered

The Virgin River spinedace, a candidate for listing by the FWS, is also considered to be an endangered species by the AGFD. This means if no successful recovery efforts are made, extinction throughout the state is highly probable.

The range of the Virgin River spinedace is limited to tributaries and the mainstream of the Virgin River at the mouth of tributaries in Utah and Arizona. The dace prefers cool, clear, swift moving water and a bottom substrate of rubble, cobbles, or sand. Modifications to the river system led to a deterioration of the spinedace habitat and subsequent population decrease. Effects of the Quail Creek flood on long-term habitat quality are not known at this time.

Desert Tortoise
(Xerobates agassizii)
Federally listed: Threatened

The FWS has listed the desert tortoise population in the Mohave Desert as threatened under provisions of the Endangered Species Act. This includes all the tortoise habitat within the Arizona Strip District. The tortoise remains a candidate for state-listing by AGFD (species which may become threatened or endangered). Reports of declining populations have generated concern about the future of this species throughout its range. As of January 1, 1988, tortoises could no longer be taken from Arizona and tortoise seasons were closed. Tortoises in captivity prior to that date could remain in captivity. Offspring may be kept for 24 months before being given to another person or to the AGFD. The federal threatened species status will affect this state regulation.

Tortoises are yearlong residents of the Arizona Strip. They occupy areas defined by the limits of the Mohave Desert vegetation associations below the 3,800-foot elevation level. In the Mohave Desert west of the Beaver Dam and Virgin mountains and in the Pakoon Basin, historic and potential tortoise range occupies some 350 square miles of the Arizona Strip. The majority of this area (85 percent) is public land.

Tortoise densities are estimated at 25-50 per square mile along the Arizona side of the border with Nevada in the Pakoon area. Densities are generally higher on the Beaver Dam Slopes than the Virgin Slopes.



The Pakoon area contains several concentrated high densities in limited acreages in the Pakoon where habitat conditions are excellent. The highest tortoise concentrations on the Beaver Dam Slopes occur in creosote-dominated areas. The creosote-Joshua tree association in the Pakoon supports moderate numbers.

The BLM has been and is currently conducting and cooperating in various studies of tortoise habitat, health and management to improve the base of knowledge for management.

Within the past 2 years, BLM has acquired 1,600 acres of proposed Category I and II tortoise habitat.

Northern Goshawk
(Accipiter gentilis apache)
Proposed for Federal Listing, Category 2

Goshawks nest in coniferous forests and will winter in lower elevations. In 1987 a nesting pair of goshawks were spotted in ponderosa pine by BLM personnel on Mt. Trumbull.

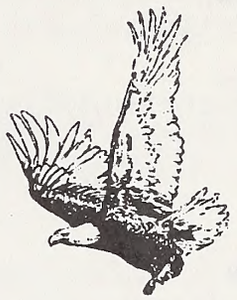
Peregrine Falcon
(Falco peregrinus anatum)
Federally listed: Endangered

The American peregrine falcon is found throughout the Arizona Strip and may inhabit the area yearlong. Recorded data on population numbers, trend, ecology, and habitat use patterns is lacking. Several eyries have been identified and many others are suspected. The birds have been observed and reported on numerous occasions throughout the district over the past 20 years. Peregrines have been documented as occurring in Paria Canyon, Vermillion Cliffs, Kanab Canyon, Hack Canyon, near Fredonia, Marble Canyon, House Rock Valley, Lee's Ferry and the Hurricane Cliffs, the Virgin Mountains, Parashant Canyon, Andrus Canyon, and the Upper Grand Wash Cliffs.

A 5-year cooperative peregrine falcon survey was initiated in 1988 and indicates that peregrine nesting and use within the district increased during 1989. Eight nest sites were identified in 1989 as compared with four in 1988.

Bald Eagle
(Haliaeetus leucocephalus)
Federally listed: Endangered

Bald eagles occur rarely on the Arizona Strip during winter. This bird utilizes the Arizona Strip as a "stop over" while in migration.



RIPARIAN AREAS

Riparian areas are a form of wetland transition between permanently saturated wetlands and upland areas. These areas have visible vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, and the shores of lakes and reservoirs with stable water levels are typical riparian areas. Excluded are sites such as ephemeral streams or washes which do not have vegetation dependent upon free water in the soil.

On the Arizona Strip, riparian vegetation includes cottonwood, willow, tamarisk, arrowweed, ash, cattails, rushes, and sedges as well as a variety of grasses and forbs.

Although accounting for less than 1 percent of the district's land area, riparian areas are among the district's most productive and important ecosystems. Characteristically, riparian areas have a greater diversity of plant and animal species than adjoining areas. Healthy riparian systems filter and purify water as it moves through them, reduce sediment loads and enhance soil stability, provide microclimatic moderation when contrasted to extremes in adjacent areas, and contribute to groundwater recharge and base flow.

Priority riparian areas on the Arizona Strip are listed in Table III-13 and shown on Map III-13. Only areas greater than two surface acres or with flows extending more than 1,000 feet are included. A comprehensive riparian/wetland inventory will be conducted to identify condition and status of potential riparian areas. Appendix 20 lists wildlife species dependent upon riparian habitat.

TABLE III-13
PRIORITY RIPARIAN AREAS ON THE ARIZONA STRIP DISTRICT 1/

Riparian Areas Name and Legal Description	Approximate Size/Length	2/ Condition	Management
Virgin River T41N R12/13/14/15W T40N R15/16W	29 miles	Fair	Partially in wilderness area and protected by the Virgin River Gorge Scenic Withdrawl. The flood of January 1989 caused extensive damage to riparian vegetation.
Beaver Dam Wash T40N R15W S4 E1/2 NW1/4 NE1/4 SW1/4	50 acres	Good	Area not grazed. Damaged by the January 1989 flood.
Paria River T41N R6/7E	24.7 miles	Fair	In wilderness area and under a rest-rotation grazing system.
Kanab Creek T38/39N R3W	12.5 miles	----	Livestock grazing reduced in numbers and season following grazing EIS.
Bitter Seep Wash T39N R4W S4,6,7,8,9,16,17,18 T40N R4W S31	9 miles	Poor	Livestock grazing adjusted from yearlong to a deferred rotation system which is being implemented following grazing EIS.
Sullivan Spring T39N R14W S10 NW4	2.5 acres	----	In wilderness area and protected by a fence.
Gates-Mullen Spring T39N R14W S3 NW4	5.0 acres	----	In wilderness area and protected by a fence.
Buckhorn Spring T34N R16W S26 SE1/4NE1/4	2.0 acres	Poor	Protected by a fence.
Grapevine Spring T34N R16W S26 NE1/4NE1/4	2.0 acres	Fair	Protected by a fence.
Whiskey Spring T34N R16W S26 SE1/4SW1/4	3.0 acres	Good	Protected by a fence.
Little Arizona Spring T34N R16W S24 NW1/4NW1/4	2.0 acres	Poor	Protected by a fence.
Cottonwood Spring T42N R6W S34 SE1/4SE1/4	4.0 acres	Good	In wilderness area. Light livestock use and area in near natural condition.
Wrather Spring T41N R6E S8 SW1/4SW1/4	2.0 acres	----	In wilderness area. Surrounding area not allocated to grazing due to topography.
Badger Creek Spring T40N R6E S12 NE1/4NW1/4	2.0 acres	----	In wilderness area. Surrounding area not allocated to grazing due to topography.
Red Rock Spring T36N R16W S5 SE1/4NE1/4	0.5 acres	----	Protected by a fence.
Middle Spring T36N R16W S7 NE1/4SE1/4	2.0 acres	----	Protected by a fence.
Cane Spring T38N R14W S34 NE1/4	5 acres	----	Fenced from allotment and grazed by few horses.
Pocum Wash T38N R14W S14,24	3.0 mile	----	Partially in a wilderness area. Allotment management plan has been drafted.
Elbow Canyon Complex (Willow Springs et al.) T39N R15W S22 S1/2	2.0 acres	----	Partially in a wilderness area. Partially fenced.
Kelly Dam T32N R12W S23 NE1/4	50 acres	----	Protected by a fence.

Source: Arizona Strip District files

1/ Only areas with more than 2 surface acres or with flows extending more than 1,000 feet are listed.
2/ Based on a one-time macro-invertebrate sample with ratings provided by Aquatic Ecosystems Analysis Laboratory-USDA Forest Service.

Currently, most major springs and their wet areas are fenced and excluded from livestock grazing, but occasionally gates are left open.

The three significant streams on the Arizona Strip have received management attention since the completion of the grazing EISs. The Paria River in Arizona, where the allotment (Lee's Ferry allotment) is suitable for grazing, is under a rest-rotation grazing system. This area is completely within the Paria Canyon/Vermillion Cliffs Wilderness and is grazed two consecutive years during the winter and rested the next year. Grazing use was also reduced approximately 60 percent and season-of-use changed from yearlong to winter. All allotments but one, along the Virgin River, are under a deferred grazing system. On New Year's Day 1989, the Quail Creek Reservoir in Utah breached, causing a major flood of the Virgin River system and extensive damage to the riparian vegetation.

Kanab Creek allotment grazing use was reduced 11 percent and the season shortened 1.5 months from October 15 to April 30.

FOREST/WOODLAND RESOURCES

As shown in Table III-9, the Arizona Strip has a large percent of pinyon-juniper woodland. There exists a smaller acreage of ponderosa pine (Map II-10).

PONDEROSA PINE

The Arizona Strip District has approximately 15,200 acres of land with varying densities of ponderosa pine forests, some of which includes commercial forest. Commercial forest lands are capable of yielding at least 20 cubic feet of wood per acre per year of commercial tree species.

The Mt. Trumbull/Mt. Logan areas have 7,266 federal acres of commercial ponderosa pine forest and Parashant has 1,940 acres.

Due to several economic and environmental factors timber has not been harvested since the 1960s. There is now interest and proposals to harvest timber in the Uinkaret Mountains.

PINYON-JUNIPER WOODLANDS

The district has not conducted an intensive woodland inventory for nearly 800,000 acres of pinyon-juniper. However, significant wood harvesting takes place in the woodlands. Woodland sales are shown in Table III-14.

Most of the cutting of green, dead-and-down wood occurs in the Wolf Hole to Black Rock corridor, White Sage-Suicide area, Buckskins, and areas north of Mt. Trumbull. The bulk of the permittees are local residents cutting fuelwood and fence posts for their needs.

TABLE III-14
Authorized Woodland Sales On The Arizona Strip District

Year	Permits	Fuelwood Fee (Cords)	Fuelwood Free (Cords)	Posts (Number)	Poles (Number)	Christmas Trees (Number)	Receipts
1983	696	1,012	1,381	4,595	400	696	$6,062
1984	370	1,168	0	5,224	0	677	$6,297
1985	428	969	652	2,965	0	415	$5,912
1986	609	653	1,965	3,440	0	566	$5,651
1987	457	694	1,015	2,350	0	635	$5,554
1988	344	683	324	1,475	0	570	$5,430

Source: Arizona Strip District files

GRAZING MANAGEMENT

The Arizona Strip District has 135 permittees and 164 grazing allotments. There were 153,840 animal unit months (AUMs) of authorized grazing use on these allotments in 1987. (AUM = the amount of forage necessary to sustain one cow or its equivalent for 1 month.) Forage allocation for wildlife species is 27,530 AUMs. The dominant kind of livestock is cattle, with 23,485 animal units. There are also 192 horses authorized to graze on the district. The overall objective of the rangeland management program is to manage the Arizona Strip District vegetation communities to meet ecological condition objectives.

Public rangeland grazing on the Arizona Strip District is guided by findings of the Shivwits and Vermillion Grazing Management EISs (BLM, 1979), ongoing rangeland monitoring studies, and allotment categorization priorities. Since the Shivwits Grazing EIS was finalized, provisions and considerations necessary to manage livestock grazing operations in desert tortoise habitat have been implemented. The changes provide forage for tortoise, advocate rest cycles in the critical spring green-up period, and locate projects where they would have the least amount of adverse impact, if any. AMPs are still needed in some of the allotments that contain desert tortoise habitat. Appendix 1 shows each allotment in the district by category with current and proposed management.

The three categories of management priority for allotments are "I" for improve, allotments that have highest need and priority for intensive management; "M" for maintain, allotments where condition and management are satisfactory; "C" for custodial, allotments with low management priority for varying reasons. Appendix 3 includes definitions and criteria for each category. Table III-15 summarizes allotment categories.

TABLE III-15
ALLOTMENT CATEGORIZATION SUMMARY ON THE ARIZONA STRIP DISTRICT

(see Appendix 3: Allotment Categorization Criteria)

	Improve (I)	Maintain (M)	Custodial (C)
Allotment Numbers	77	52	33

Source: Arizona Strip District files

The Arizona Strip District has two types of AMPs. They are the intensive and the less-intensive plans. Intensive plans involve grazing systems such as rest-rotation, Holistic Resource Management (HRM), deferred rotation, and best pasture systems. Intensive AMPs have cooperatively funded rangeland improvements planned which are necessary to implement the grazing systems. Intensive systems set a constraint of no greater than 50 percent utilization on key forage species. Table III-16 summarizes allotment grazing systems. Vegetation conversion practices including prescribed fire are used in conjunction with grazing management on Category I allotments to achieve rangeland management objectives.

Less-intensive grazing systems allow the rancher to operate seasonally but forage species utilization is limited to a maximum average of 45 percent. The permittee finances range improvements on public lands or cooperates with BLM in construction projects.

TABLE III-16
CURRENT AND IMPLEMENTED ALLOTMENT GRAZING SYSTEMS ON THE ARIZONA STRIP DISTRICT

Grazing System	Number of Allotments
Rest Rotation	13
Deferred Rotation	54
Holistic Grazing Mngt.	1
Best Pasture	2
Season-Long	82
Less-Intensive	12

Source: Arizona Strip District files

WILD, FREE-ROAMING BURROS

The Wild and Free-Roaming Horse and Burro Act became law on December 15, 1971, authorizing the Bureau to manage wild horses and burros on public lands. The Act provided that wild and free-roaming horses and burros be protected from unauthorized capture, branding, harassment, or death. They are to be considered an integral part of the natural system based upon their 1971 distribution.

The district has no horses but some 380 burros roam freely on lands administered by the Arizona Strip and Las Vegas BLM districts and the Lake Mead National Recreation Area, administered by the National Park Service. They

are managed on public lands through the Tassi-Gold Butte Herd Management Area Plan (HMAP) completed in 1982. Initial management goals are to maintain a population level of 90-100 animals in the Arizona portion. The critical habitat area for the burros covers some 194,000 acres, of which 51,000 acres are administered by the BLM. The Arizona burros occupy the Lower Grand Wash Cliffs, Grand Wash Bay of Lake Mead, and the Tassi Spring area (Map III-14). The Shivwits MFP allocated 600 AUMs of forage to burros.

Burros generally inhabit areas having permanent water. Most of the burros stay within three miles of Lake Mead or near several springs in Lower Grand Wash. Cattle also tend to concentrate near these water sources. Excluding Lake Mead, a moderate degree of competition for forage and water resources exist between burros, cattle, mule deer, and bighorn sheep where their ranges overlap.

WILDLIFE HABITAT

The district has habitats for a wide variety of wildlife species. Wildlife habitat is currently being managed in accordance with six wildlife habitat management plans (HMPs) that cover the entire district (Map III-15). Habitat improvements have been carried out over many years and include burning, chaining and seeding of decadent habitat areas. Water has been made available for wildlife through construction of about 140 catchments, reservoirs, and spring developments. Livestock waters are also designed to accommodate wildlife use. Wildlife habitat monitoring studies are conducted to assess the results of management towards meeting wildlife objectives.

In cooperation with Arizona Game and Fish Department (AGFD), several species of wildlife have been transplanted to new and former ranges. These include pronghorn antelope, desert bighorn sheep, Kaibab squirrel, Merriam's turkey, and most recently, mule deer. Priority species include:

Pronghorn Antelope *(Antilocapra americana)*

Within the district pronghorn inhabit 756,000 federal acres within the Clayhole, Mainstreet, and House Rock areas. Populations as of January 1989 are estimated in Table III-17.

Pronghorn are native to the Arizona Strip and were reported as common by early residents. Pronghorn were apparently eliminated from the Strip in the early 1900s. They were reintroduced to the area beginning in 1961 and continue today.

The existing Clayhole and Paria-Kanab Creek HMPs provide management direction for pronghorn habitat on public land. Management actions to help restore pronghorn to their former ranges within the Arizona Strip include modifying fences to allow pronghorn movement, improving forage species composition and diversity, modifying fences around water lots to accommodate pronghorn access, and developing or making water sources available for pronghorns. Most planned water sources for pronghorn have been completed. Map III-16 shows pronghorn antelope habitat.

TABLE III-17
PRONGHORN HABITATION AREAS ON THE ARIZONA STRIP AS OF JANUARY 1989

Habitat Area	Pronghorn	Remarks
Clayhole	250-270	Some interchange between the Clayhole and Mainstreet herds is known to take place.
Mainstreet	192	
House Rock Valley	120	

Source: Arizona Strip District files

Desert Bighorn Sheep *(Ovis canadensis nelsoni)*

With the exception of occasional sightings, bighorn sheep were believed to have been eliminated from the Arizona Strip around the turn of the century.

In a cooperative effort beginning in 1979 between BLM and AGFD, 56 desert bighorn were captured in the Black Mountains of Lake Mead National Recreation Area and released in the Virgin Mountains of the Arizona Strip. Sixty-two animals were released between 1983 and 1986 in their historic range of the Grand Wash Cliffs. Also beginning in 1984, transplants were completed in the Kanab Creek and Paria Canyon/Vermillion Cliffs historic ranges. Primarily because of desirable habitat conditions, the Paria population has exhibited one of the best reproductive success rates for any bighorn transplant in Arizona.

Estimated populations of desert bighorn on the district as of January 1989 are presented in Table III-18.

Arizona Strip's public lands provide 222,343 acres of habitat in these four herd areas (Map III-17).

TABLE III-18
POPULATIONS OF DESERT BIGHORN SHEEP ON THE ARIZONA STRIP AS OF JANUARY 1989

Habitat Area	Bighorn Sheep	Objective
Virgin Mountains	125-150	100
Grand Wash Cliffs	65	100
Paria Canyon/ Vermillion Cliffs	114	175
Kanab Creek	45-60	130

Source: Arizona Strip District files

The Paria-Kanab Creek, Black Rock, and Parashant HMPs outline management objectives and actions for bighorn sheep. They identify crucial bighorn habitat as well as habitat used on an infrequent basis. Completed projects benefitting bighorn sheep include the construction of 17 water catchments and developments. Sheep habitat management is also directed by the Rangewide Plan for Managing Habitat of Desert Bighorn Sheep.

Mule Deer
(Odocoileus hemionus)

Mule deer were not common on the Arizona Strip prior to the arrival of early settlers. After that, deer herds began to increase. The 1990 AGFD deer population estimates indicate there are fewer than 2,000 head on the district, down from about 4,600 head in the late 1970s.

The district has about 1.3 million acres of public lands available for deer habitat (Map III-18). The higher deer density areas are the Buckskin Mountains, Black Rock, Parashant, and the Kanab Creek drainage.

Habitat quality for deer, both summer and winter, has been changing over the past 20 years. This may be attributed to the removal of domestic sheep, improved livestock management, and aggressive fire suppression. Succulent forage on crucial summer ranges and young nutritious browse on winter ranges are giving way to older browse, trees, and perennial grasses. Numerous waters have been developed to make more habitat accessible to deer. Changes in habitat quality, over harvest, and an abundance predators have been implicated as possible reasons for the decline in the deer herds.

In December 1988, 107 deer from Utah were transplanted to the Mt. Trumbull area. This was primarily an attempt to relocate excess deer rather than to restock deer numbers in Arizona, although recent sightings of deer in the area indicate an increase of resident animals.

Merriam's Turkey
(Melagris gallopavo merriami)

About 350 of these turkeys occur on approximately 15,200 acres of public land in ponderosa pine habitat on the Arizona Strip District (Map III-19). About 70 percent of these occur in the Mt. Trumbull/Mt. Logan area, with the remainder on the Parashant and Black Rock Mountain.

Several waters have been constructed, to assure reliable water in turkey habitat.

Kaibab Squirrel
(Sciurus kaibabensis)

The Kaibab squirrel, a tassel-eared and bushy white-tailed species, is unique to the Kaibab Plateau (Map III-20). These squirrels were transplanted to the Mt. Trumbull ponderosa pine forest in the 1970s. They have expanded to all suitable habitat throughout the 10,700 acres of ponderosa pine in the Mt. Trumbull area. The exact number of squirrels is unknown, but 1,000 individuals are estimated. The population now sustains hunting pressure. Both populations and habitat are in good condition. There are few known conflicts with other resource uses.

RECREATION RESOURCES

The district provides a wide array of dispersed recreation opportunities, ranging from vehicle sightseeing to wilderness backpacking. The primary attraction is the opportunity for visitors/users to engage in these activities in remote, unregulated settings. Demand for recreation opportunities throughout the Arizona Strip is expected to increase as the human population grows and more land is developed.

The Recreation Opportunity Spectrum (ROS) is a means of identifying primitive to urban recreation opportunities on public lands. Table III-19 describes the recreation opportunities throughout the Arizona Strip. Table III-20 lists the approximate acreages of each ROS Class on the district. Map III-21 depicts their geographic distribution of ROS classes on the district.

The ROS system recognizes that recreational experience opportunities depend on several variables, some which can be controlled and some which cannot. The following three variables which are the focus of this RMP, can be controlled: physical, social, and managerial. Appendix 17 describes these settings as they occur along the spectrum from primitive to urban.

TABLE III-19
RECREATION EXPERIENCE OPPORTUNITIES BY ROS CLASS

ROS Class	Experience Opportunity
PRIMITIVE	Opportunity for isolation from the sights and sounds of humans, to feel a part of the natural environment, to have a high degree of challenge and risk, and to use outdoor skills.
SEMI-PRIMITIVE NON-MOTORIZED	Some opportunity for isolation from the sights and sounds of humans, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.
SEMI-PRIMITIVE MOTORIZED	Same as semi-primitive non-motorized, however, explicit opportunity to use motorized equipment while in the area.
ROADED NATURAL	About equal opportunities for affiliation with other user groups and for isolation from sights and sounds of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present.
RURAL	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. These factors are generally more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant, except in those activities involving challenge and risk.
URBAN	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. Experiencing the natural environment and the use of outdoor skills is largely unimportant.

Source: Arizona Strip District files

TABLE III-20
ROS CLASS ACREAGE ON THE ARIZONA STRIP DISTRICT

ROS Class	Total Acres*	Percent of Total
Primitive	270,000	9.0
Semi-Primitive Non-motorized	659,000	21.0
Semi-Primitive Motorized	1,586,000	50.0
Roaded Natural	526,000	17.0
Rural	78,000	2.9
Urban	4,000	0.1
TOTAL	3,123,000	100.0

Source: Arizona Strip District files

*Includes federal and non-federal land

Ponderosa pine forests, basalt-capped mesas, colorful sandstone cliffs, canyons, and Mohave desert bajadas and basins are some of the physical settings available to visitors. Interstate 15 and Highway 89A are major tourist routes in the northern part of the district and provide the only paved access to the area. A network of unpaved roads and 4-wheel drive trails provide access to the central and southern parts of the district. Popular areas for recreation include Paria Canyon, Mt. Trumbull, and Black Rock Mountain. Because of its common borders, the district also provides access to some of the more remote areas of the Grand Canyon National Park and Lake Mead and Glen Canyon National Recreation Areas.

Dispersed recreation, defined as recreation requiring a variety of sites but needs no special facilities, is the main type of recreation for visitors to the Arizona Strip. Table III-21 lists specific types of dispersed recreation and their estimated visitor use, excluding wilderness areas, for 1987. These figures are best estimates as no accurate registration system exists for the majority of the district.

The Virgin River Campground and adjacent interpretive site located along I-15 in the Virgin River Gorge and the Dominguez & Escalante interpretive site on Highway 89A near the base of the Vermillion Cliffs are the only developed BLM facilities within the district.

AREAS OF RECREATIONAL AND SCENIC IMPORTANCE

The Uinkaret Mountains

This area covers 108,000 acres surrounding the Mt. Trumbull and Mt. Logan wilderness areas. The area includes the Uinkaret volcanic field, an area of about 144 square miles of gently rounded cinder cones, basalt-capped mesas, ice caves and rugged lava flows with pinyon-juniper and ponderosa pine vegetation. This area has moderate recreational use, mostly campers traveling to Toroweap in the Grand Canyon. It provides good opportunities for geological, botanical and historical sightseeing, semi-primitive camping, wildlife viewing, big and small game hunting, pinyon nut collecting, and firewood and Christmas tree cutting.

The Parashant

Parashant is an area on the south end of the Shivwits Plateau that forms the upper watershed of the Parashant Canyon, an ephemeral tributary of the Grand Canyon. Its uniqueness lies in the extensive stringers of ponderosa pine that grow along the drainages at elevations between 5,900 and 6,200 feet. This is well below the recognized minimum elevation of 6,500 feet for ponderosa habitat.

The area borders on and provides access to Mount Dellenbaugh and several remote canyons on the Lake Mead National Recreation Area and the Grand Canyon. Its mixture of ponderosa and pinyon/juniper woodland provides habitat for mule deer, small game, raptors and other game and non-game species.

The remote location of the Parashant area offers opportunities for unregulated recreation, including backcountry exploration by vehicle, hiking, backpacking, camping, picnicking, big and small game hunting, and wildlife observation. The area is contiguous to the western portion of the Grand Canyon and offers excellent scenic vistas of the canyon.

One other area of scenic importance is the Virgin River scenic withdrawal in the Virgin River Gorge. Most of the withdrawal is now included in either the Paiute or Beaver Dam Mountains Wilderness. During a withdrawal review, BLM recommended that the portions of the scenic withdrawal inside the wilderness be revoked and the remainder retained to fully protect the scenic resource. The retained portion would include the strip of land between the wilderness boundaries within the Virgin River Gorge.

Eight other areas are recognized as having outstanding scenic and cultural values and excellent opportunities for recreational activities in remote settings. These areas and their special values are shown in Table III-22.

WILDERNESS MANAGEMENT

There are eight wilderness areas which, by definition, are considered special recreation management areas (SRMAs). The Arizona Wilderness Act of 1984 designated these 8 areas, ranging from 6,700 to 89,400 acres within Arizona. Portions of two are managed jointly with Utah BLM and one with the Forest Service. These eight wilderness areas provide a variety of opportunities for those seeking greater isolation and primitive and unconfined recreation activities.

Beaver Dam Mountains Wilderness, Arizona, 15,100 Acres

This wilderness consists of rugged mountains, gently sloping alluvials and the north side of the Virgin River Gorge. Vegetation includes Joshua trees, desert shrubs, and several rare plant species. Notable wildlife species include desert bighorn sheep, desert tortoise, birds of

TABLE III-21
VISITOR USE IN EXTENSIVE RECREATION MANAGEMENT AREAS (1987) ON THE ARIZONA STRIP DISTRICT

Activity	Recreation Visitor Days	Value Per Day	Total Value
Recreational OHV	1,380	6.70	$ 9,000
Driving for pleasure	1,830	6.70	12,000
Horseback riding, hiking, backpacking, walking for pleasure	2,470	20.76	51,000
Backcountry/trailhead camping	3,500	14.20	192,000
Hunting, trapping	8,100	35.18	285,000
Rock collecting, nature study, photography (includes Virgin River campground, Dominguez & Escalante Interpretive Site)	1,930	6.70	13,000
Special Recreation Permits (includes Rhino Rally motorcycle race)	890	6.70	6,000
Winter sports	25	13.98	3,000
TOTALS	20,125		571,000

Richard G. Walsh and John Loomis, Dec. 1986, The Contribution of Recreation of National Economic Development. Socioeconomics.

Source: Arizona Strip District files

TABLE III-22
ADDITIONAL AREAS ON THE ARIZONA STRIP DISTRICT WITH OUTSTANDING RECREATION OPPORTUNITIES

Area	Special Values
Paria Plateau	Remoteness, geologic scenery, extensive archaeological features
House Rock Valley	Geologic scenery, big game hunting, great western trail, birds of prey
Kanab Creek Tributaries	Geologic scenery, rock hounding, big game hunting, archaeological features, historical features, birds of prey, remote
Lower Grand Wash Cliffs	Historic mining features, remote, wild and pristine
Hidden Canyon	Geologic features, vegetative variety, dramatic vertical relief, remote, 4x4 access
Parashant, Andrus, and Whitmore Canyons	Geologic scenery, big game hunting, archaeological features, birds of prey, remote

Source: Arizona Strip District files

prey, woundfin minnow, and the Virgin River chub. Uniquely, this wilderness is separated from the Paiute Wilderness by Interstate 15 (a potential scenic byway), enabling thousands of travelers to view the wilderness as they drive through the Virgin River Gorge.

Paiute Wilderness, Arizona, 88,000 Acres

The Virgin Mountains form the backbone of the Paiute Wilderness Area, which ranges from ponderosa pine to Mohave desert. It includes the south side of the Virgin River Gorge, readily seen from I-15. The large elevation changes provide diverse vegetation communities and wildlife habitat for over 250 species including mule deer, mountain lion, desert tortoise, and desert bighorn sheep. Excellent scenic vistas are available from the top of the Virgin Mountain ridgeline.

Grand Wash Cliffs Wilderness, Arizona, 37,000 Acres

This 12-mile stretch of the Grand Wash Cliffs is wild and very remote. Many rugged canyons, scenic escarpments, miles of cliffs, and sandstone buttes mark the transition between the Colorado Plateau and Basin and Range provinces. The cliffs are important habitat for desert bighorn sheep and raptors, while the low desert area contains desert tortoise and gila monsters.

Paria Canyon-Vermillion Cliffs Wilderness, Arizona, 89,400 Acres

Nationally known for its beauty and solitude, Paria Canyon has towering walls streaked with desert varnish, huge red rock amphitheaters, sandstone arches, wooded terraces, and hanging gardens. Along the canyon bottom, the Paria River and numerous springs combine to form a ribbon-like oasis of willows and cottonwoods.

Joining the Paria Canyon at its mouth are the Vermillion Cliffs. This 3,000-foot escarpment dominates the area with its thick Navajo sandstone face, steep, boulder-strewn slopes, rugged arroyos and stark overall appearance. This attraction is visible along a potential scenic byway (Highway 89A).

Petrified logs, dinosaur tracks, and two historic trails provide information on the history of the area along with numerous remote and pristine areas atop the Vermillion Cliffs. Several significant archaeological sites on the Paria Plateau are included in the wilderness. Desert bighorn sheep inhabit the wilderness area.

Cottonwood Point Wilderness, Arizona, 6,900 Acres

This wilderness is part of an impressive Navajo sandstone plateau overlooking the lone Arizona Strip country. The 1,000-foot multicolored cliffs, wooded canyons, craggy pinnacles and alcoves dominate the landscape and are visible from a potential scenic byway (State Highway 389). This area adjoins the southern end of the Canaan Mountain Wilderness Study Area in Utah which has been recommended for wilderness designation by the Utah BLM.

Mt. Trumbull Wilderness, Arizona, 7,900 Acres

This wilderness contains the slopes and summit of Mt. Trumbull, involving an elevation change of nearly 3,000 feet. The unit has basalt ledges, pinyon-juniper woodlands, ponderosa pine forests, and groves of Gambel oak and aspen. These vegetation communities are habitat for mule deer, wild turkey, and the unique Kaibab squirrel.

Mt. Logan Wilderness, Arizona, 14,600 Acres

This area of recent volcanic origin contains Mt. Logan and portions of the Uinkaret Mountains. It includes basalt ledges, ponderosa pine forests, pinyon-juniper woodlands and a large, colorful, naturally eroded amphitheater known as Hells Hole. Like Mt. Trumbull, it provides habitat for deer, turkey, and Kaibab squirrels. The ponderosa stand here contains some of the largest of this species found anywhere in Arizona.

Kanab Creek Wilderness, Arizona, 6,700 Acres

Managed jointly by BLM and Forest Service, Kanab Creek is part of the largest canyon system on the north side of the Grand Canyon. It is rich in impressive rock formations, colorations, and water and wind-carved features. Numerous springs provide an interesting contrast with the generally arid terrain. The cliffs are home to bands of desert bighorn sheep as well as the endangered peregrine falcon.

Table III-23 lists four types of dispersed recreation and their estimated level of visitor use for 1987 in the wilderness areas. These figures are best estimates as the district has no accurate registration system (except for Paria Canyon) for these areas.

TABLE III-23
VISITOR USE IN WILDERNESS AREAS ON THE ARIZONA STRIP DISTRICT (1987)

Wilderness	Non-motorized Visits	Non-motorized Visitor Hrs.	Camping Visits	Camping Visitor Hrs.	Hunting Visits	Hunting Visitor Hrs.	Boating Visits	Boating Visitor Hrs.
Paiute	60	500	0	0	200	1,200	30	150
Beaver Dam Mtns	25	200	0	0	30	180	30	100
Grand Wash Cliffs	17	140	0	0	22	180	0	0
Cottonwood Point	40	200	10	500	10	700	0	0
Mt. Logan	40	200	10	500	10	700	0	0
Mt. Trumbull	60	300	5	200	10	500	0	0
Kanab Creek	50	3,600	60	3,600	10	500	0	0
Paria Canyon-Vermillion Cliffs	2,700	149,100	1,700	137,700	20	300	0	0
TOTALS	2,992	154,240	1,785	142,500	312	4,260	60	250

Source: Arizona Strip District files

VISUAL RESOURCES

Approximately 75 percent of the Arizona Strip District, from the Grand Wash Cliffs east to Marble Canyon, lies in the Colorado Plateau physiographic province. The province is characterized by consolidated sedimentary rock carved by steep-walled drainages. Wooded plateaus, deep, vertical-walled canyons, broad valleys, and mountain peaks of volcanic origin are found in abundance. Nearly all of the scenic canyons are the result of centuries of cutting by the numerous tributaries of the Colorado River such as Kanab Creek, Paria Canyon, and the Virgin River Gorge.

The remaining 25 percent of the district, from the Grand Wash Cliffs west to the Nevada border, is in the Basin and Range province, characterized by alluvial valleys bounded by north-south trending mountain ranges.

Visual resource inventory classes are based on three determinations: scenic quality, visual sensitivity, and distance zones.

Scenic values on the district are varied and numerous, important not only for their intrinsic value, but also for the foreground and background provided by the outstanding scenery in the surrounding region. Scenic quality is described as the visual appeal of an area. The rating is based on seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Scenery is classified as A, B, or C, A being the highest scenic quality (Table III-24 and Appendix 20).

TABLE III-24
SCENIC QUALITY ACREAGES ON THE ARIZONA STRIP DISTRICT

Quality Class	Area (Acres)	Percent
A (High)	448,000	14
B (Medium)	1,050,000	34
C (Low)	1,625,000	52
TOTAL	3,123,000*	100

Source: Arizona Strip District files

*This includes federal and non-federal lands

Lands are placed into one of four visual resource inventory classes that represent the relative value of the visual resources. Classes I and II represent the highest value; Class III, moderate value; and Class IV is of least value. The inventory classes provide the basis for considering visual values in the RMP process. Visual resource management (VRM) classes are established through the RMP process and may differ from the inventory classes because of resource allocation decisions in the RMP. For example, an area that was determined to be in Class II during the inventory process could be designated as a scenic ACEC and classified as VRM Class I based on the importance of the visual values.

The existing VRM classes were determined during the management framework plan (MFP) process in 1976.

These classes are listed in Table III-25 and are depicted in Map II-22.

VRM classes are given objectives based primarily on the amount of acceptable change to the visual resource.

TABLE III-25
VISUAL RESOURCE MANAGEMENT ACREAGES BY VRM CLASS ON THE ARIZONA STRIP

	Area (Acres)	Percent
I	276,000	9
II	837,000	24
III	528,000	17
IV	1,481,000	50
TOTALS	3,122,000*	100

*This includes federal and non-federal lands.

Source: Arizona Strip District files

TRANSPORTATION/ ACCESS

Paved access to the public lands on the Arizona Strip is limited. Major highways include a 30-mile segment of Interstate 15 in the northwest corner of the district and US 89A between the Utah state line north of Fredonia and the Navajo Bridge at Marble Canyon. One other major highway, US 389, runs between the Utah state line at Colorado City and Fredonia. These latter two highways provide a single east-west route across about two-thirds of the district. There are two additional small segments of paved roads, Highway 91 near Littlefield, Arizona, and the other south of Fredonia, Arizona. All other access from outside the district is either by improved or unimproved natural-surfaced roads. These are maintained by BLM or other federal agencies, counties, or private groups or individuals. Table III-26 lists road classes and length (Map III-8).

Easements and/or fee title ownership of the land has been gained by the Arizona Department of Transportation for all public highways. The Forest Service has acquired an easement for the paved road south from Fredonia to the forest boundary. Mohave County is in the process of obtaining easements for the roads across public lands. BLM has acquired easements for Quail Hill Road, one easement from the State of Arizona, and three from private individuals. Other easements and retained rights-of-way owned by BLM are limited in number and location. These have primarily been obtained in response to specific needs.

TABLE III-26
TRANSPORTATION/ACCESS ROUTES ON THE ARIZONA STRIP DISTRICT BY TYPE OF ACCESS

Route	Length
PAVED ROADS	140 MILES
PRIMARY UNPAVED	650 MILES
SECONDARY UNPAVED	1,822 MILES
FOUR-WHEEL DRIVE	2,790 MILES
TOTAL	5,402 MILES

Source: Arizona Strip District files.

SOCIAL AND ECONOMIC CONDITIONS

This section addresses three components of the social framework of the Arizona Strip District: population, income, and pertinent social perceptions. For the purposes of this RMP the primary social community is defined by a hypothetical line extending from St. George, Utah east to Page, Arizona, southwest to Flagstaff, west to Kingman, northwest to Lake Mead, and east again to St. George.

POPULATION

In 1986 about 100,000 people lived in the Arizona Strip RMP area (Table III-27). Most (40 percent) of these resided in Flagstaff. St. George represented about 20 percent of the total, Kingman about 12 percent, with other smaller communities and individual dwellings comprising the remaining 28 percent.

The data reflect a strong growth pattern with an average annual population increase of about 4,000. Table III-28 shows major changes in southern Washington County, Utah, with close to a 50 percent population growth in most of the towns. Percentage increases in the Arizona towns also reflect considerable expansion.

The population data include certain important elements. For example, the portion of retirees is higher than the statewide average. Information available from the Utah

TABLE III-27

POPULATION AND PER CAPITA INCOME FOR SELECTED COUNTIES IN ARIZONA, UTAH, AND NEVADA

Area Name (3)	4/1/80 Census (1)	7/1/86 Est. (2)	% Change 80-86	Per Capita Income 1979	1985	% Change 79-85	1988 Estimate
ARIZONA	2,716,598	3,244,000	19.4	7,042	10,561	50.0	3,605,700
COCONINO COUNTY	75,008	86,100	14.8	5,631	8,032	42.6	94,800
FLAGSTAFF	34,743	39,180	12.8	6,155	8,670	40.9	42,580
FREDONIA	1,040	1,430	37.4	4,718	6,826	44.7	1,355
PAGE	4,907	6,840	39.5	8,141	11,847	45.5	7,190
MOHAVE COUNTY	55,865	76,600	37.1	6,673	9,041	35.5	81,400
COLORADO CITY	1,439	2,120	47.6	1,499	2,032	35.6	2,350
KINGMAN	9,257	10,760	16.3	7,046	9,294	31.9	11,560
UTAH	1,461,037	1,655,000	14.0	6,305	8,535	35.4	1,678,000
KANE COUNTY	4,024	4,800	18.7	4,528	6,379	40.9	4,850
BIG WATER	154	170	9.7	3,018	4,435	47.0	N/A
KANAB	2,148	2,770	28.9	5,257	7,205	37.1	N/A
WASHINGTON COUNTY	26,065	38,600	48.2	4,869	6,346	30.3	41,200
HILDALE	1,009	1,530	51.9	1,466	1,746	19.1	1,630
HURRICANE	2,361	3,210	35.8	4,361	5,823	33.5	3,425
ST. GEORGE	13,146	19,800	50.6	5,406	7,072	30.8	21,130
SANTA CLARA	1,091	1,630	49.8	5,256	6,490	23.5	1,740
WASHINGTON	3,092	4,540	46.7	4,141	5,485	32.5	4,850
NEVADA	800,508	964,000	20.5	8,453	11,200	32.5	N/A
CLARK COUNTY	463,087	569,500	23.0	8,259	11,129	34.7	N/A
MESQUITE	914	1,100	19.9	4,580	6,143	34.1	N/A

(1) Includes corrections made to 1980 counts since the census. These corrected counts were used as the base for the estimate.

(2) Estimates have been rounded to the nearest 10 except for county and state equivalents, which have been rounded to the nearest 100 or 1,000. (Source for 1980 to 1986 estimates: Local Population Estimates [1986 Population & 1985 Per Capita Income], "1986 Population and 1985 Per Capita Income Estimates for Counties and Incorporated Places," Current Population Reports, Series P-26, U.S. Bureau of the Census.)

(3) Source for 1988 Estimates: Arizona data from the Arizona Statistical Review, 44th Annual Edition, Valley National Bank of Arizona, Phoenix, 1988; Utah data from "Selected Demographic, Labor Market, and Economic Characteristics for St. George and Washington County, Utah Department of Economic Security, Labor Market Information Services, Salt Lake City, 1988.

TABLE III-28
NON-FARM EMPLOYMENT ON THE ARIZONA STRIP BY SECTOR: 1987

Employment Source/Type	Arizona		Utah	
	Coconino Co.	Mohave Co.	Washington Co.	Kane Co.
Manufacturing	2,850 (8%)	2,950 (14%)	968 (9%)	62 (4%)
Mining	150 (1%)	325 (2%)	60 (1%)	9 (1%)
Construction	1,650 (4%)	1,650 (8%)	688 (6%)	12 (1%)
Trans/Pub Util	2,600 (7%)	1,200 (6%)	560 (5%)	27 (2%)
Trade	8,775 (23%)	6,100 (27%)	3,184 (29%)	428 (31%)
Fin/Ins	825 (2%)	1,000 (5%)	500 (5%)	37 (3%)
Services	9,650 (26%)	4,650 (22%)	2,722 (25%)	454 (32%)
Government	10,950 (29%)	3,525 (16%)	2,214 (20%)	368 (26%)
TOTALS	37,450 (100%)	21,400 (100%)	10,896 (100%)	1,397 (100%)

Sources: Arizona: Arizona Statistical Review, 44th Edition, Valley National Bank, Phoenix, September, 1988. Utah: Utah's Southwestern District, A Labor Market Information Report, Utah Department of Economic Security, Salt Lake City, August, 1988.

TABLE III-29
NON-FARM EMPLOYMENT ON THE ARIZONA STRIP BY ARIZONA COMMUNITY: 1985

Employment Source/Type	Fredonia	Flagstaff	Kingman	Williams
Mining	49 (10%)	6 (0%)	80 (2%)	59 (5%)
Construction	25 (5%)	1,000 (5%)	387 (7%)	88 (8%)
Manufacturing	180 (37%)	1,652 (8%)	711 (13%)	79 (7%)
Trans/Pub Util	28 (6%)	1,183 (6%)	286 (5%)	117 (10%)
Trade	68 (14%)	5,896 (29%)	1,475 (28%)	322 (27%)
Fire	0	673 (3%)	239 (5%)	14 (1%)
Services	50 (10%)	4,794 (24%)	743 (14%)	174 (15%)
Government	87 (18%)	4,631 (23%)	1,400 (26%)	260 (22%)
TOTALS	487 (100%)	19,835 (98%)	5,321 (100%)	1,113 (95%)

Source: U.S. Census Local Population Estimates: Series P-26, Number 82-53-SC, May 1985.

TABLE III-30
NON-FARM AVERAGE WEEKLY EARNINGS ON THE ARIZONA STRIP: 1987

Employment Source/Type	Arizona		Utah	
	Coconino Co.	Mohave Co.	Washington Co.	Kane Co.
Manufacturing	403.10	362.35	330.23	250.84
Mining	537.42	466.29	520.85	
Construction	335.63	309.48	318.00	
Trans/Pub Util	470.61	416.78	361.61	290.08
Trade	199.46	191.29	196.62	
Fin/Ins	426.74	362.02	295.15	312.69
Services	275.89	280.48	228.46	207.00
Government	410.97	397.02	316.38	291.46

Sources: Arizona: Arizona Department of Commerce, 1988. Utah: Utah's Southwestern District, A Labor Market Information Report, Utah Department of Economic Security, Salt Lake City, August, 1988.

Department of Economic Security indicates that retirees constitute a significant part of the total population in the St. George area. In Washington County more than 16 percent of the people are over age 62; in comparison, only 4 percent of the state is older than 62. Retirees also are important sectors of the population in the towns and unincorporated communities between St. George and Las Vegas (Littlefield, Mesquite), and in the towns and settlements between Kingman and Hoover Dam (Meadview, Dolan Springs, Chloride).

Six Native American Tribal reservations are in the Arizona Strip RMP area. Three are in Coconino County. The Kaibab-Paiute Reservation, north of the Grand Canyon, had a 1987 population of 275. The Havasupai Reservation, lying within the Grand Canyon, had an estimated 465 residents in 1987. The Coconino County population of the Navajo Reservation had an estimated population of 16,364 in 1982. Mohave County includes the Hualapai Reservation with 1,200 people. The Moapa Reservation in Clark County has a population of approximately 150. The Shivwits Reservation in Washington County, Utah, had an estimated population of 217 in 1989.

INCOME

There is a wide variation in the per capita income of the residents of towns in the Arizona Strip RMP area (Table III-27). For example, the data shows a range from $1,746 in Hildale, Utah, to $11,847 in Page, Arizona. The weighted average per capita income for the towns in the Arizona Strip RMP region is $9,993.

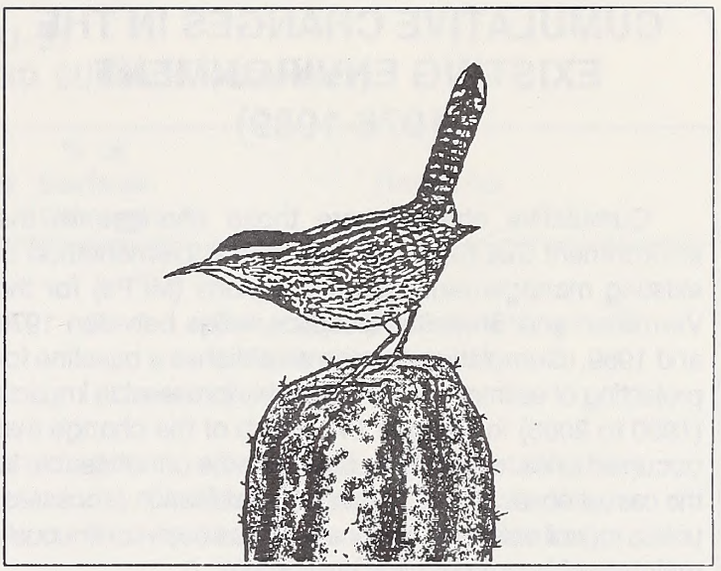
Nonagricultural employment is the primary income source. Table III-28 summarizes relevant data by county. The three sectors of government (federal, state, local), trade (wholesale, retail), and services employ the majority (about 75 percent) of residents.

Table III-29 shows non-farm employment by selected Arizona communities. Communities, with the exception of Fredonia, have similar percentage of employment by sector. Fredonia's highest employment is in manufacturing.

Wage and salary data show the mining sector has the highest weekly average earnings (Table III-30). Services and trades have the lowest weekly earnings.

SOCIAL PERCEPTIONS

This section identifies and discusses those types of perceptions that relate to social issues and concerns of the RMP. For example, economic data indicates that



tourism is a major factor in the economy of the area. A partial indication of its importance is employment in the services sector, including lodging and the food service industries. This sector provides 25 percent of the total jobs in the four-county region.

Because of the economic importance of tourism, many residents support uses of the public lands that would draw tourists. These would involve outdoor recreation, easier access to recreational opportunities, and maintenance of suitable habitat for support and growth of wildlife. In contrast, activities that could harm or diminish tourism would not be popular.

Management of public lands that preserves special features also benefits tourism. Special features include areas with an atmosphere of remoteness and/or solitude, scenic attractiveness, and other exceptional properties.

In general, the residents do not perceive the area as one in which people earn high income or wages. They believe that economic development efforts are needed to stabilize the employment base of the region and to improve income. Widespread support would exist for the increase of jobs in manufacturing, construction, and mining. Consequently, because mining activities on public lands provide high-wage jobs, much of the Arizona Strip RMP population would favor those efforts (Tables III-28 and III-30).

On the other hand, there are some groups and individuals who are strongly opposed to mining operations on the public lands and, in particular, to uranium mining activities. However, the local effects of mining employment and wages is not a concern for them. Their concerns are focused on the possible detrimental effects uranium mining could have on the environment.

CUMULATIVE CHANGES IN THE EXISTING ENVIRONMENT (1976-1989)

Cumulative changes are those changes to the environment that have resulted from implementation of existing management framework plans (MFPs) for the Vermillion and Shivwits Resource Areas between 1976 and 1989. Cumulative change establishes a baseline for projecting or estimating the reasonably foreseeable impacts (1990 to 2005) in Chapter IV. Much of the change that occurred prior to the MFPs has become unnoticeable to the casual observer due to natural rehabilitation processes, unless topsoil was removed or a road has been continuously maintained by mechanical equipment.

To facilitate this analysis, all environmental factors are grouped into four categories; physical, biological, remoteness (recreational settings and opportunities), and social/economic.

PHYSICAL COMPONENT

Table III-31 depicts the estimated cumulative surface disturbance since 1976. The table does not include value judgments on whether the changes are desirable or consider mitigation measures that were applied to the various actions and practices. Mitigation typically reduces but does not totally eliminate adverse impacts to the land. In the long-term, natural processes combined with appropriate mitigation can virtually eliminate most surface disturbances.

Management of the watershed, wildlife habitat, livestock grazing, and woodland products programs has changed an estimated 61,750 acres of surface change since 1976. Most of the surface change results from vegetation type conversion and reseeding to improve watershed condition, wildlife habitat, rangeland condition, and livestock forage. However, the changes have been of short duration involving initial disturbance from vehicles, chains, plows, etc. used in accomplishing land treatments or harvesting woodland products. Of the 61,750 acres of surface change from these programs, only 535 acres of roads and structural developments are considered permanent changes.

Management of the lands and minerals programs has resulted in an estimated 5,900 acres of surface change since 1976. Approximately 4,800 acres are considered long-term, permanent changes resulting from lands actions (land developments and agriculture following transfer to private ownership, and rights-of-way and leases). Significant changes from the lands program include the authorization and construction of the Navajo-McCullough 500 kV powerline which crosses about 90 miles of the district from Glen Canyon to Nevada. The land exchange program resulted in (1) acquisition of all state of Arizona lands in designated wilderness; (2) acquisition of 13,000 acres of private lands in the Parashant area; and (3) exchange of about 2,000 acres near Littlefield, Arizona for about 7,500 acres of critical bighorn sheep habitat in the Black Mountains near Kingman, Arizona.

Significant changes from the minerals program include (1) the development of eight uranium mines of which one is in production, two are in various stages of development, two are undergoing reclamation and three which have been closed and reclaimed; (2) active mining of gypsum deposits at two locations and a third, inactive; (3) relinquishment of mining claims by Energy Fuels Nuclear in designated wilderness areas. Locatable mineral development activities have disturbed about 766 acres of the surface since 1976 resulting in temporary change. Five miles of new road will be closed and rehabilitated and 38 miles of upgraded roads will be rehabilitated to near-original road conditions after termination of the specific need. Leasable and salable minerals account for another 350 acres of surface disturbance since 1976.

Management of the cultural resource, forestry, and recreation programs has resulted in an estimated 115 acres of surface change in the past 14 years. Of the 115 acres disturbed, 95 acres were short-term surface changes involving archaeological excavations, salvage of timber, dispersed camping, campsites associated with special recreation permits (SRPs) and staging areas associated with the Rhino Rally motorcycle race. Ten acres disturbed by these programs are considered long-term, permanent changes involving visitor facilities. This estimate does not include recreational OHV disturbance related to use of ATVs, motorcycles, etc. Most off-highway activity appears to be related to other uses such as grazing, mineral exploration, administrative field work, camping and hunting and are included in the acreage figures for the various programs listed in Table III-31.

Cultural resources are known to exist throughout the district. Clearances and compliance with the National Historic Preservation Act for all activities which are authorized or carried out by the BLM have helped in finding, defining, and protecting cultural resources. Many significant sites have been studied by BLM archaeologists or through contracts and volunteer efforts.

BLM transportation system upgrades on Black Rock and Quail Hill roads accounted for 27.5 miles and 96 acres of surface disturbance. Black Rock was completed in 1979 and Quail Hill scheduled for 1990 completion.

TABLE III-31
CUMULATIVE CHANGES TO LAND SURFACE (1976-1989)

Program	Source Of Impact	Acres	% of Surface Change	Remarks
LANDS	Development associated with land use authorizations and ownership adjustments	4,800	7	Generally represents a long-term commitment of resources to development
MINERALS	Exploration and development of locatable, leasable, salable, minerals	1,100	2	Generally represents a temporary commitment of resources; after completion of exploration or mining, surface disturbances are rehabilitated
CULTURAL	Excavations, field schools	5	0	Assumes surface disturbance from excavations as well as fencing and access
WATERSHED	Land treatments and associated roads	21,000	31	Vegetation type conversions for improving watershed conditions; short-term surface impact
FORESTRY	Commercial harvest	30	0	Assumes temporary impacts; includes access
WOODLANDS	Fuelwood, posts, poles, Christmas trees	21,350	31	Generally represents short-term impacts from harvest of woodland products and related access
TRANSPORTATION	Black Rock and Quail Hill road upgrades	95	0	Includes new surface disturbance by BLM; Black Rock road completed in 1979; Quail Hill scheduled for completion in 1991
GRAZING	Rangeland developments, land treatments, roads	18,000	27	Primarily vegetation type conversions for improving rangeland conditions; short term surface impact
WILDLIFE	Wildlife developments, land treatments, roads	1,400	2	Assumes short-term impacts for treatments, pipelines, spring developments; long-term for roads, reservoirs, catchments, tanks
RECREATION	SRPs and camping	80	0	Permanent facilities; SRPs and camping generally long-term temporary
TOTALS		67,860	100	

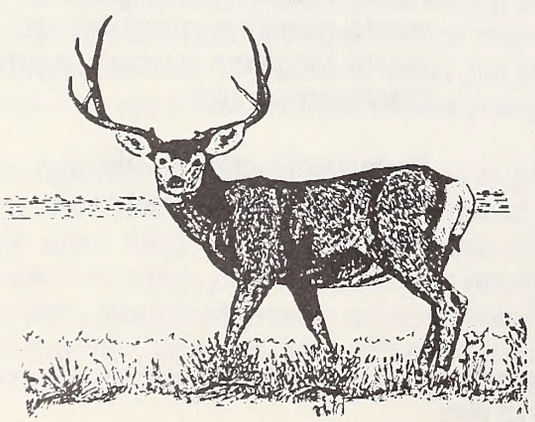
Source: Arizona Strip District files

BIOLOGICAL COMPONENT

The cumulative change of 14 years of management under the MFPs has resulted in both positive and negative change to animals and plants. Table III-31 summarizes the approximate amount of change that has occurred to the surface of the land during that period. As the surface is disturbed, biological components of the environment are changed also.

Approximately 39,900 acres (59 percent of the total surface disturbance since 1976) of homogeneous and less productive stands of sagebrush or pinyon-juniper with poor understory vegetation conditions were chained, plowed, or burned, and seeded. This was done to reduce erosion and sedimentation, enhance vegetation cover, improve rangeland conditions, wildlife habitat and livestock forage. The end result has been increased bio-diversity on-site by creating change in a stagnant or undesirable plant community. Short-term changes to wildlife species occurred throughout the disturbance phase. Mobile wildlife were temporarily displaced, but quickly returned to the changed and improved habitat. The reseeded areas created more diverse vegetation communities than previously existed and can generally be utilized by a wider variety of species than were present before treatment. Vegetation diversity resulting from land treatments was enhanced through use of a variety of seed mixtures that benefit wildlife as well as livestock.

The harvest of woodland products on 21,350 acres (31 percent of the total surface disturbance since 1976) has created temporary surface changes, mostly in the form of overland vehicle travel and removal of random overstory trees. This disturbs vegetation and temporarily displaces wildlife. When woodland activities were concentrated in specific areas, changes were similar to land treatments in that overstory was removed, allowing for a more productive understory. Some negative changes to wildlife species have occurred in areas where small roads are created to facilitate harvesting of woodland products.



The rangeland grazing program for the district is guided by the Shivwits and Vermillion Grazing Management environmental impact statements (EISs) and subsequent monitoring and evaluation activities. Table III-16 shows the various grazing systems that have been implemented through AMPs prior to and following the EISs. Appendix 2 shows the trend in rangeland condition. The monitoring data shows that 90 percent of the district is in an upward or static trend. Improved rangeland conditions have contributed to increased biological diversity.

Management of riparian areas has been intensified since completion of grazing EISs and implementation of AMPs and HMPs. Ten of the priority riparian areas have been fenced to exclude livestock grazing; four have had adjustments in grazing use and numbers; three are not allocated for grazing due to topography and location; and the remaining area has a draft AMP in progress.

Management of special status species has increased. BLM has helped in the development of recovery plans for the woundfin minnow, Virgin River chub, peregrine falcon, and Brady and Siler pincushion cactus. Inventory and moni-toring efforts have been increased for these species, the desert tortoise, and fickeisen and bristly plains cactus.

Six wildlife HMPs have been developed and are in various stages of implementation. Habitat improvements including land treatments, water developments, and modification of fences and waterlots have been implemented to improve conditions and improve diversity of wildlife on the district. In cooperation with the Arizona Game and Fish Department, several species of wildlife have been transplanted to new or former ranges. These include pronghorn antelope (Table III-17), desert bighorn sheep (Table III-18), Kaibab squirrel, Merriam's turkey and mule deer. The combination of land treatments, riparian management, special status species recovery programs, and implementation of AMPs and HMPs has contributed significantly to the biological diversity of both plants and animals on the district.

Locatable, leasable, and salable minerals account for temporary changes to plants and animals on 1,100 acres (2 percent of the total surface disturbance since 1976). Wildlife are displaced near exploration and development sites generally for the duration of operations. Some species such as songbirds, bighorn sheep or raptors may acclimate to ongoing disturbances with little consequence other than temporary loss of habitat.

Changes which reduce biological diversity would be related to lands program actions (land developments and agriculture following transfer to private ownership, and rights-of-way and leases) or permanent developments which eliminate vegetation, wildlife or their interactions.

REMOTENESS COMPONENT

Remoteness is defined as "recreation experience opportunities in backcountry, natural-appearing settings." Experience opportunities (or the possibilities for visitors to engage in activities in order to feel satisfaction) depend on physical, social and managerial settings. Backcountry areas having different combinations of these three settings generally fall into the four, less urban classes, as described in Table III-19: primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural. Table III-20 lists the current recreation opportunity class acreage based on the miles of roads listed in Table III-26. Map III-8 shows the roads constructed for exploration and mining purposes.

Management of the watershed, grazing, wildlife, and woodland products programs has brought about the greatest change to recreational opportunities. Obvious changes to physical settings brought about by land treatments, facility development, and associated roads have shifted recreation classes from the primitive toward the urban end of the recreation opportunity spectrum. These management activities have made human influences more obvious, thus affecting remoteness. However, the change over time is less noticeable as vegetative diversity and succession within treated areas occurs.

Mineral exploration and development have slightly changed physical settings with new and upgraded roads and development sites. These activities have generally changed recreation opportunities in semi-primitive, non-motorized and motorized classes by shifting settings toward the urban end of the recreation spectrum. However, these activities are considered short-term changes due to mitigation, which includes almost total rehabilitation of access roads, mine yards, and powerlines. The greatest change associated with mineral activities appears to be from new and upgraded roads on social settings. As roads are built or upgraded to improve hauling access, access for the general public is also improved. This has a tendency to encourage the public to go into areas they previously avoided because of poor road conditions. With greater numbers of visitors in an area comes a change toward the urban end of the social spectrum.

With growth and associated development in the Littlefield-Beaver Dam area and the Colorado City-Cane Beds area has come changes to recreation settings on nearby public lands. Use authorizations and land ownership adjustments have either increased the number of growth-related developments on public lands or transferred ownership to private or state interests. In either case, recreation settings have moved toward the urban end of the spectrum in these areas.



In 1984, the designation of eight wilderness areas (265,600 acres or 9.2 percent of lands administered by BLM on the Arizona Strip) contributed significantly to the preservation of remoteness and semi-primitive and primitive recreation opportunities on the district. Areas such as Paria Canyon, Vermillion Cliffs, Cottonwood Point, Mt. Trumbull and portions of Beaver Dam and Virgin Mountains, Grand Wash Cliffs, Mt. Logan, and Kanab Creek will be preserved in their natural conditions for future generations to enjoy.

SOCIAL-ECONOMIC COMPONENT

The social-economic component is made up of three main attributes, which include population, income, and social perceptions. BLM actions affect each of these attributes in various ways. The following summarizes the effects of these actions on each of these attributes through implementation of the existing MFPs.

Population

BLM actions which have encouraged and accommodated population growth within the district include the granting of rights-of-way, issuing of leases, processing of land exchange applications and patents, and authorizing the use of mineral materials. Together these uses have affected about 5,100 acres of public land.

Most of the land is located near communities. Here, approximately 3,150 acres have been affected through R&PP patents and leases, airport leases, landfill and small tract leases, and private exchanges. All of these actions are directly related to the expansion of the population and communities on the district.

The remainder of the land is dispersed throughout the district. This acreage includes various road and utility rights-of-way, communication sites, and mineral material rights-of-way and sites. Together these authorizations have affected about 1,950 acres. These types of authorizations facilitate population changes near the district, but do not directly change populations.

Income

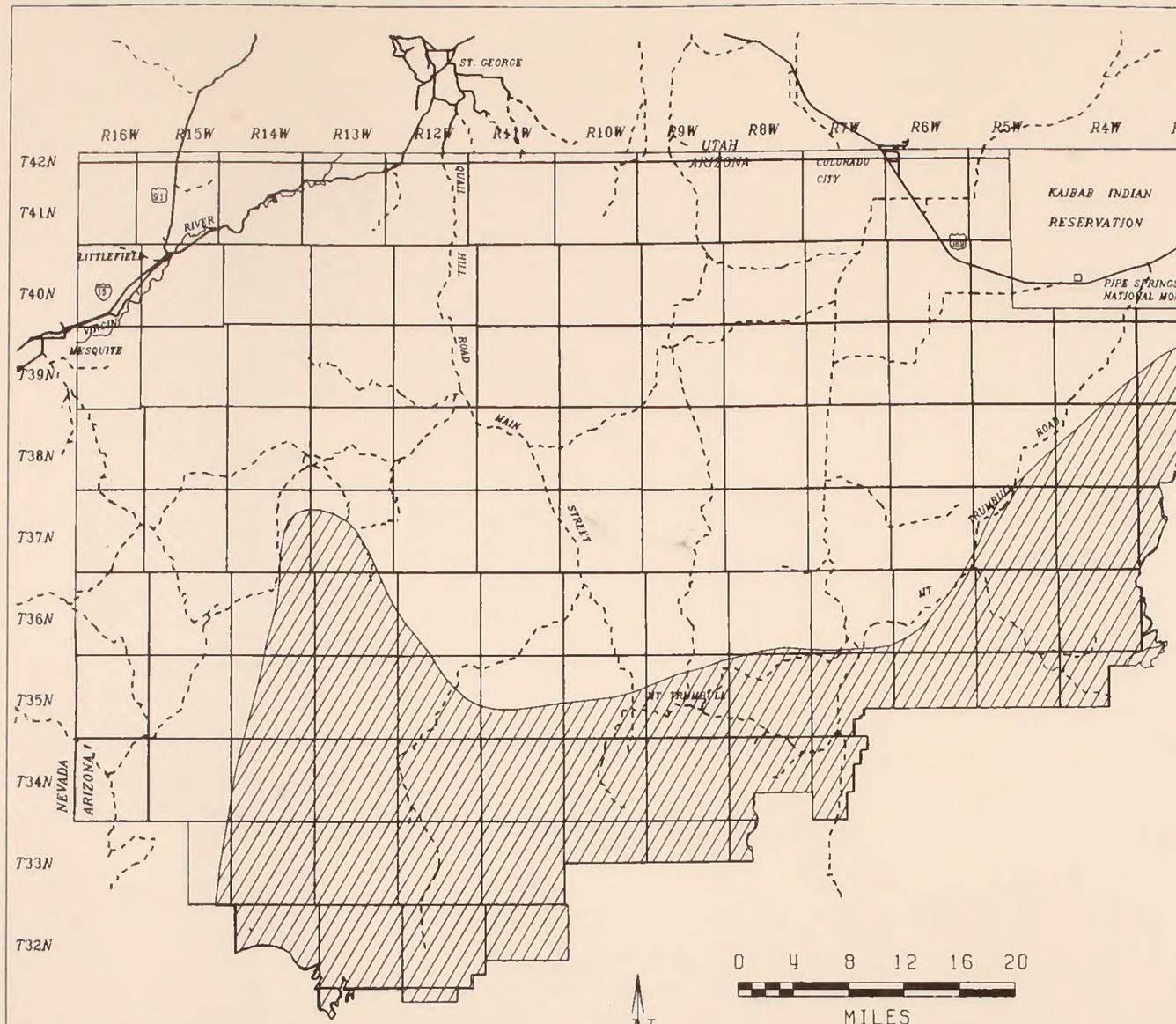
Income within the Arizona Strip region is derived primarily from government, trade, and services. Together, these types of employment provide approximately 75 percent of the jobs. The remaining 25 percent is composed of jobs in the manufacturing, construction, mining, transportation/public utilities, and fire suppression fields. Recent BLM land use management actions under MFP direction have not significantly changed the traditional types of jobs in the area nor the associated per capita income.

Social Perceptions

Since the MFPs were developed in the mid-1970s, social perceptions concerning the district and resource use and development have intensified. One of the factors leading to the increase in intensity is the development of resources in the district, specifically uranium mineral resources. Various groups and individuals are opposed to resource development on the public lands. The actions which encourage the development of the natural resources are generally looked on with disfavor by this group and actions which would restrict uses on the public lands would be generally favored. Opposition to uranium mineral resource development appears to be further based on perceptions about the environmental effects of mining and the philosophical arguments concerning the use of uranium and storage of radioactive waste.

Residents which reside within or adjacent to the district, believe that economic development is needed. The perception is that development would tend to stabilize employment and increase income. To this end, there appears to be widespread local support for increased activities related to manufacturing, construction, and mining. These jobs are generally higher paying than those in the service sector. The sought-after employment opportunities would also provide more stable employment opportunities, less likely to be affected by seasonal fluctuations such as service sector jobs related to tourism.





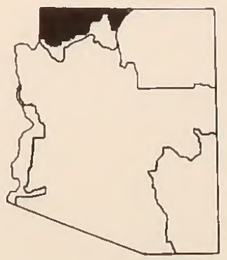
ARIZONA STRIP DISTRICT
OIL AND GAS
RESOURCE POTENTIAL

0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS

N

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

LOCATION MAP

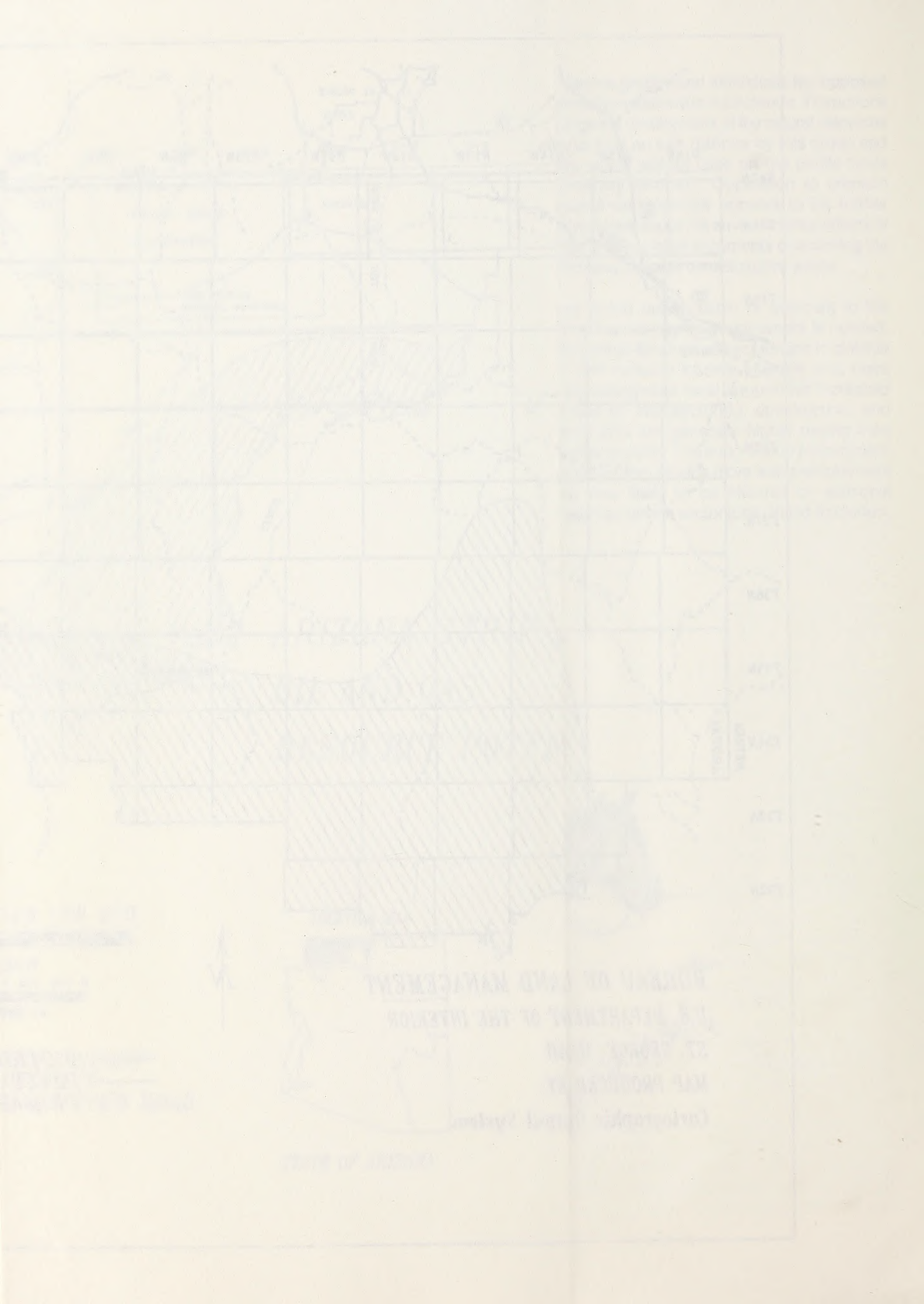


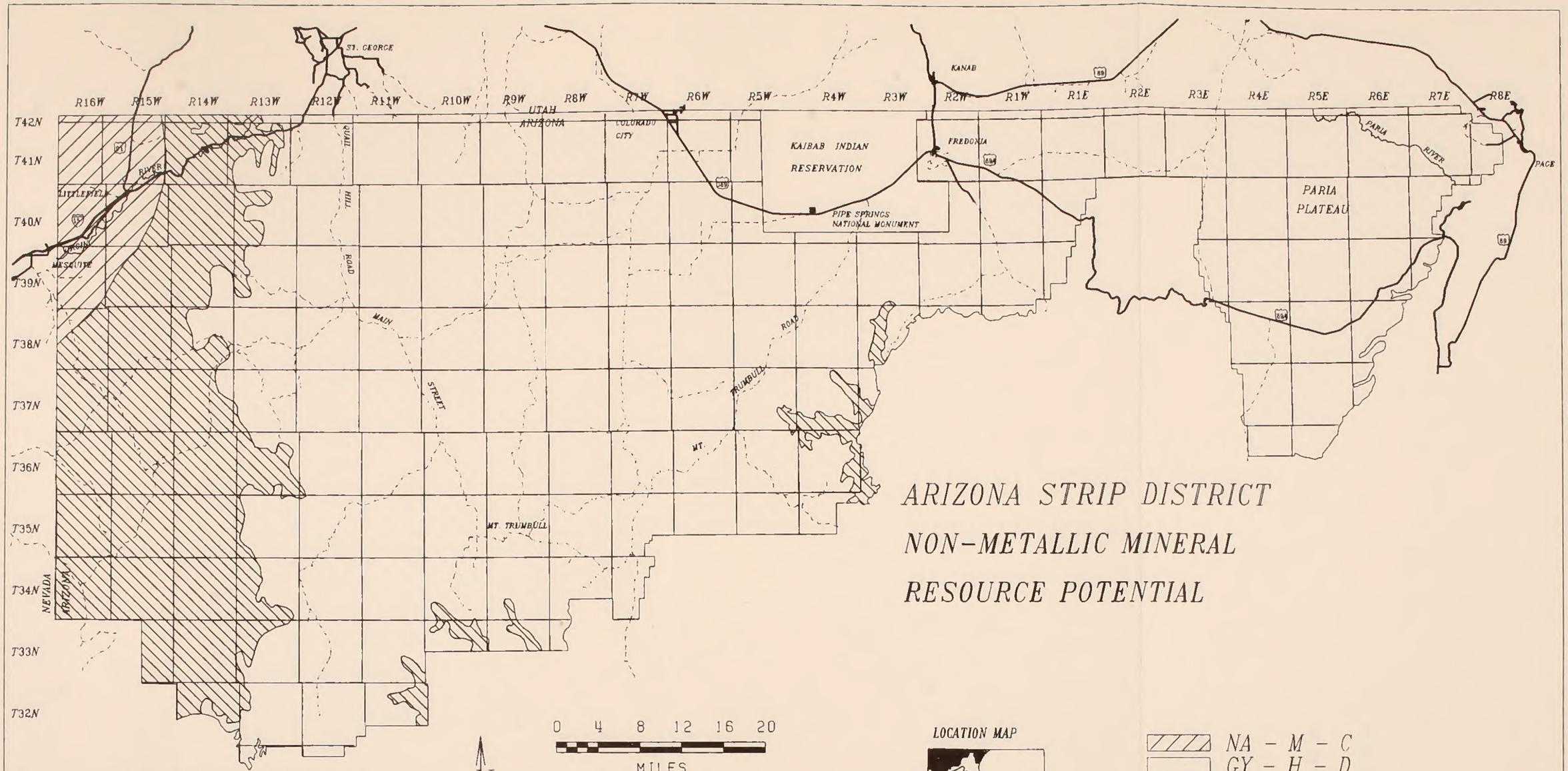
STATE OF ARIZONA

OG – L – B
OG – M – C

OG = OIL & GAS
M = MODERATE POTENTIAL
L = LOW POTENTIAL
B = INDIRECT EVIDENCE
C = DIRECT EVIDENCE

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

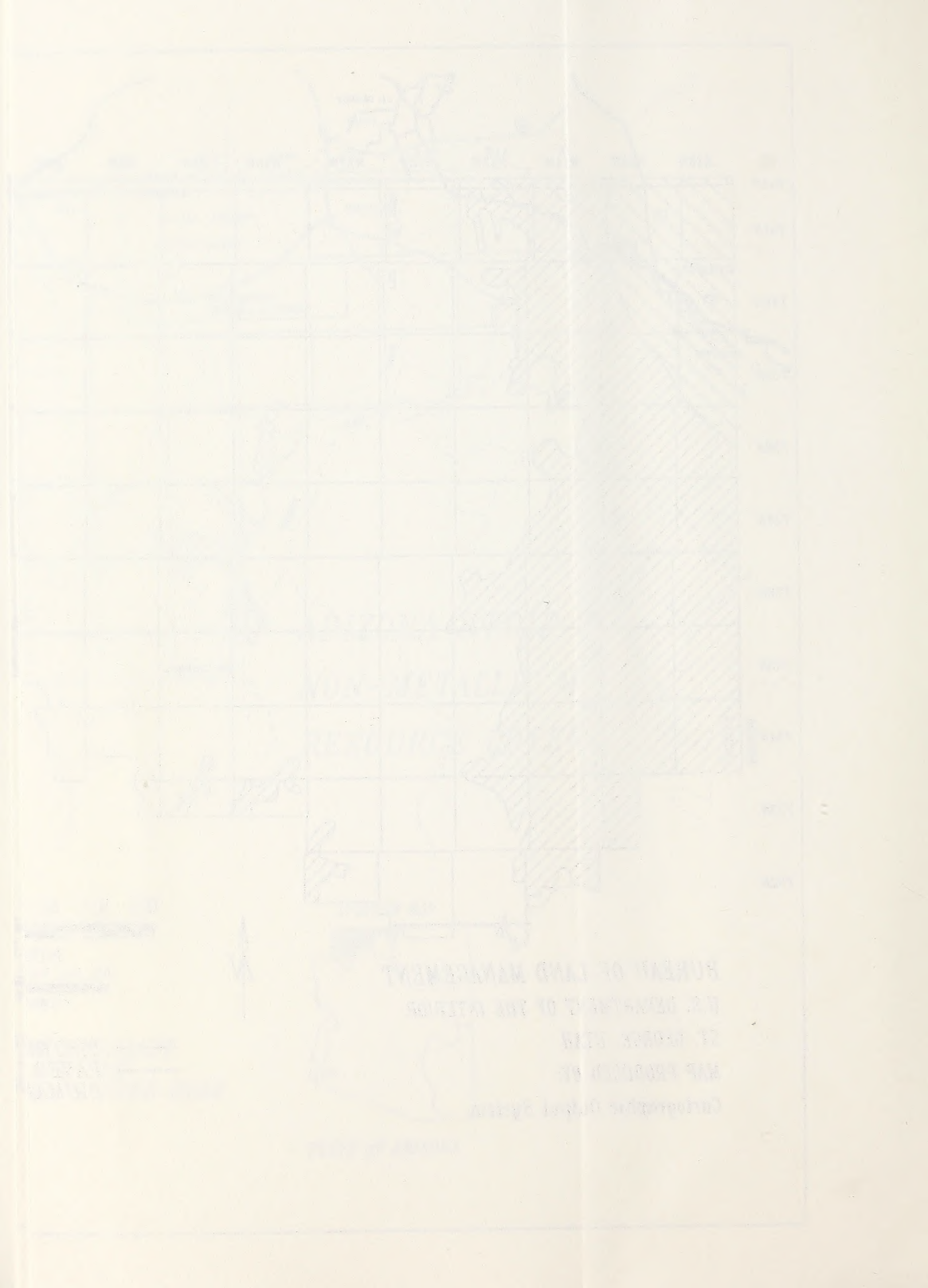


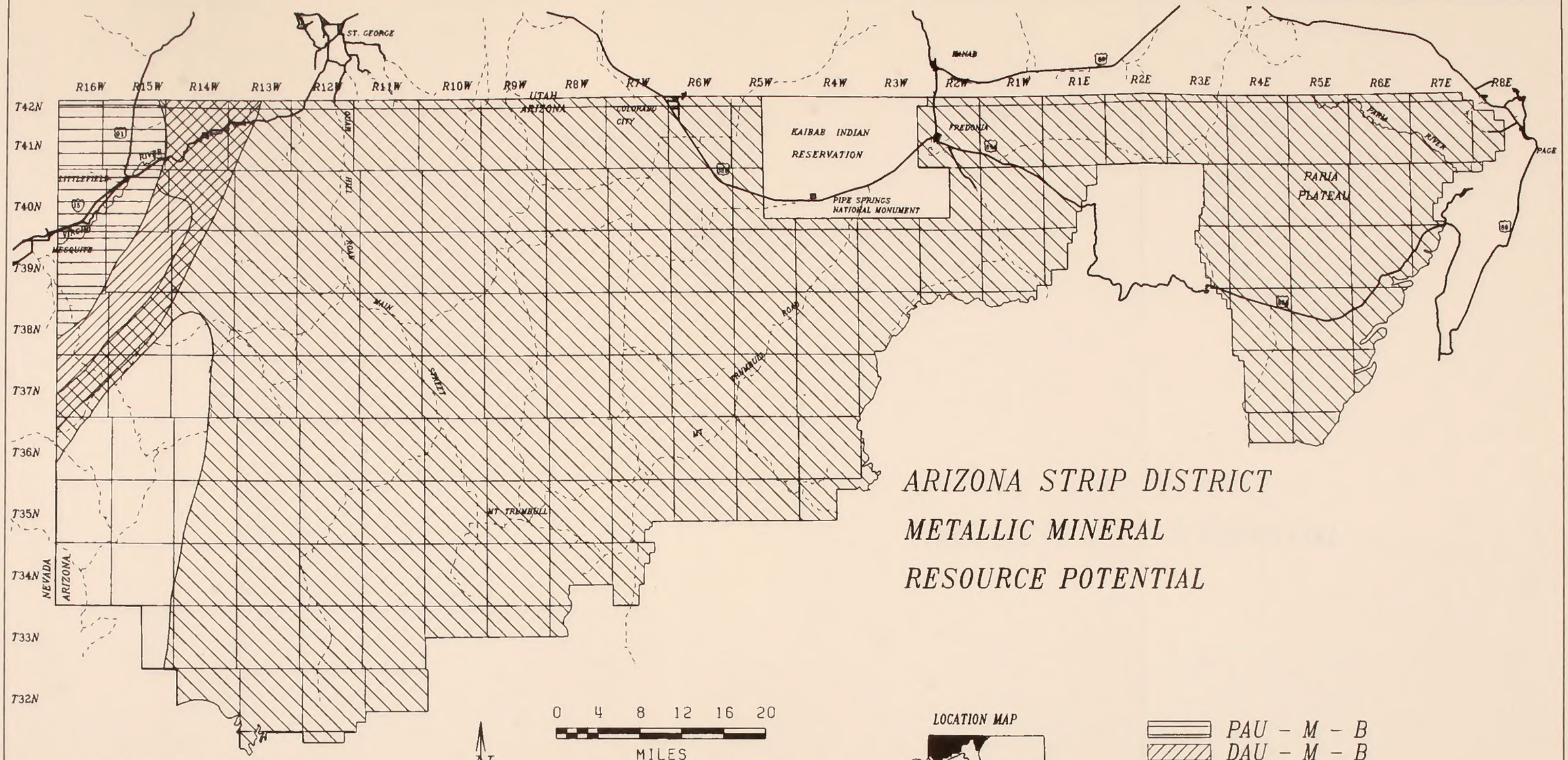


ARIZONA STRIP DISTRICT

NON-METALLIC MINERAL RESOURCE POTENTIAL

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





ARIZONA STRIP DISTRICT

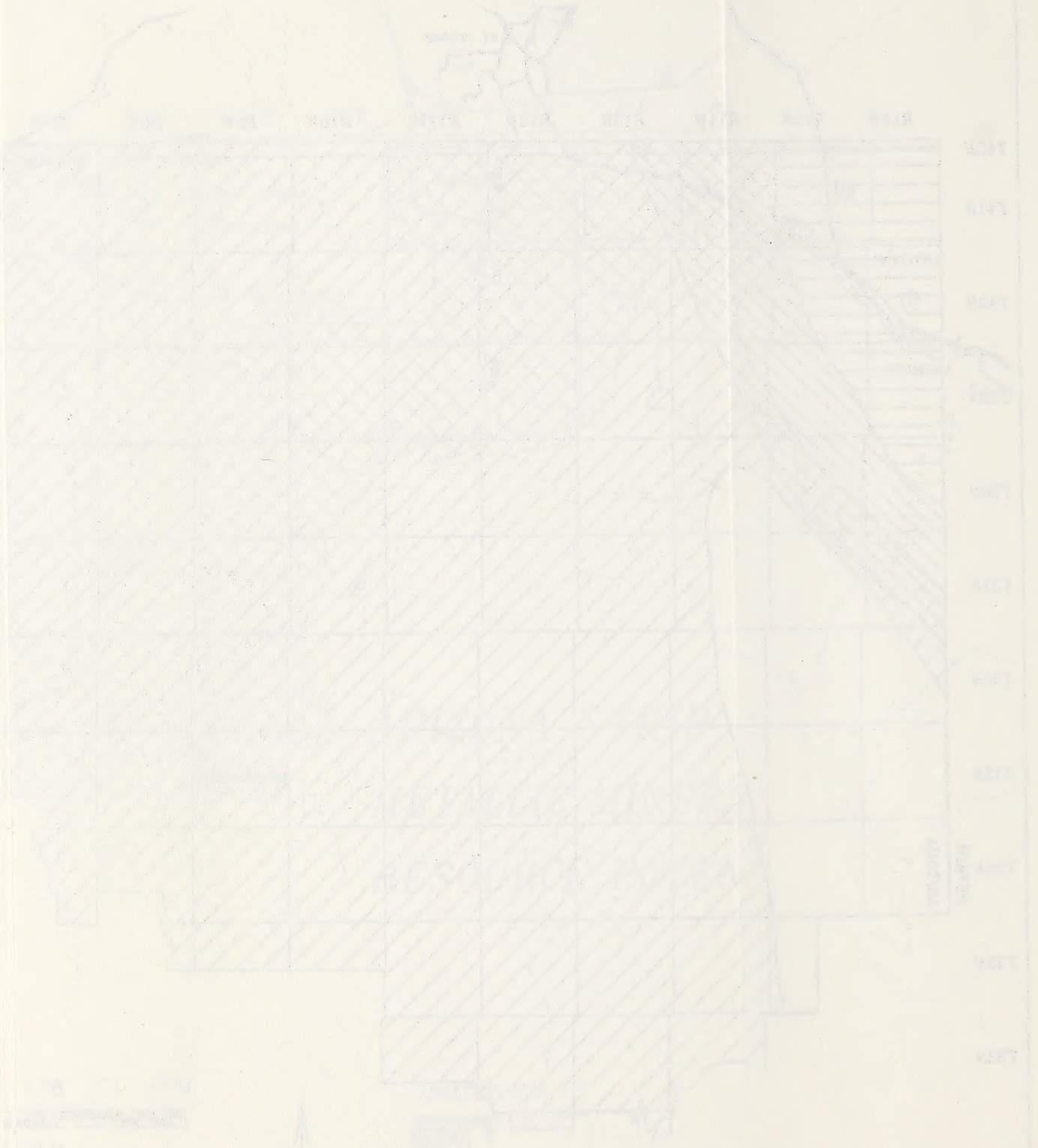
METALLIC MINERAL

RESOURCE POTENTIAL

PAU – M – B
DAU – M – B
BPM – H – D

PAU = PLACER GOLD
DAU = DISSEMINATED GOLD
BPM = BRECCIA PIPE MINERALS
H = HIGH POTENTIAL
M = MODERATE POTENTIAL
B = INDIRECT EVIDENCE
D = ABUNDANT DIRECT EVIDENCE

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

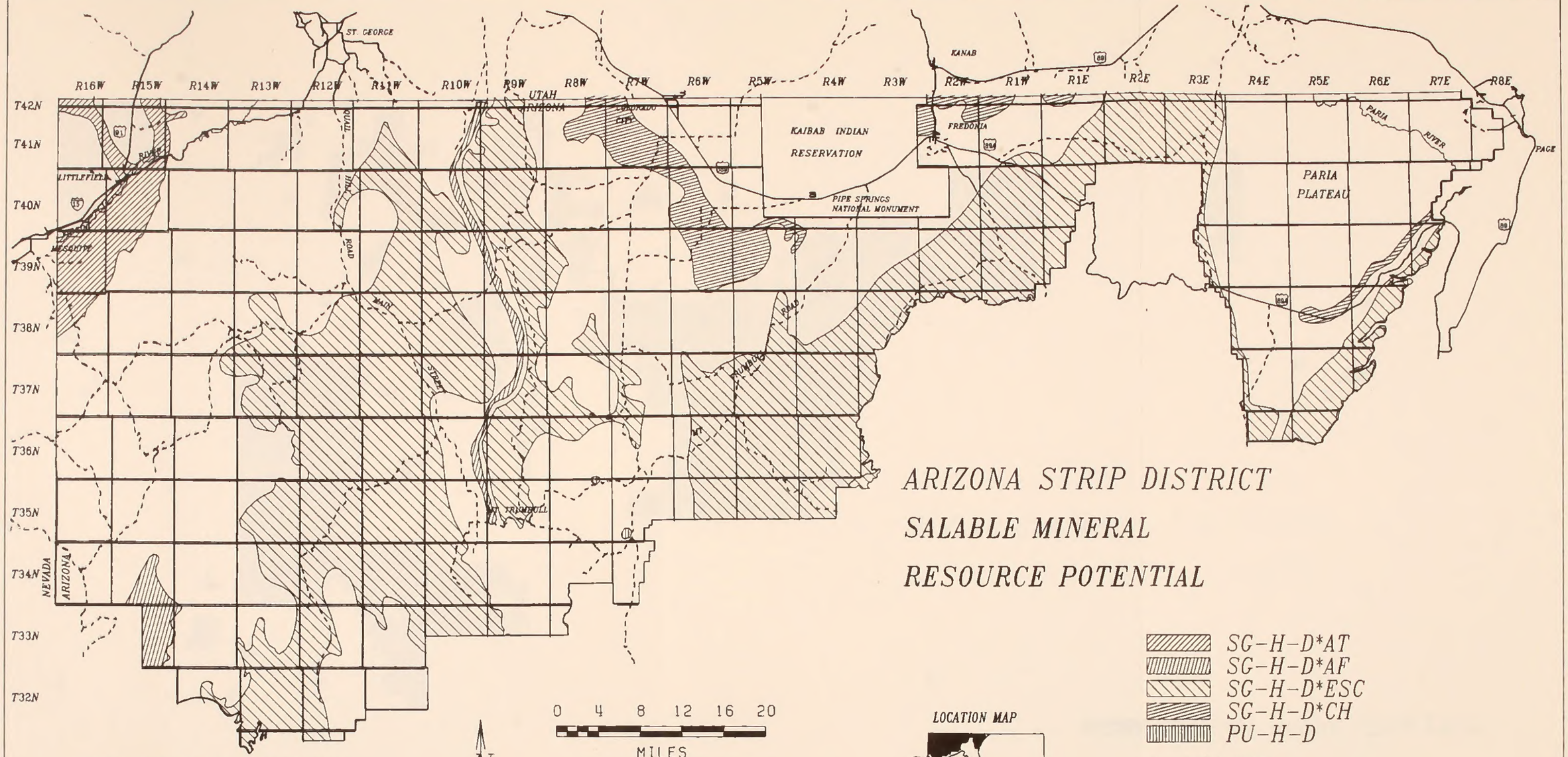




ARIZONA STRIP DISTRICT
URANIUM RESOURCE POTENTIAL

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





ARIZONA STRIP DISTRICT

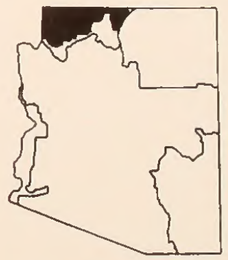
SALABLE MINERAL

RESOURCE POTENTIAL

SG–H–D*AT
SG–H–D*AF
SG–H–D*ESC
SG–H–D*CH
PU–H–D

SG = SAND & GRAVEL
AF = ALLUVIAL FAN
AT = ALLUVIAL TERRACE
CH = CHINLE FORMATION
ESC = EPHEMERAL STREAM CHANNEL
PU = PUMIC (CINDER CONE)
H = HIGH POTENTIAL
D = ABUNDANT DIRECT EVIDENCE

LOCATION MAP

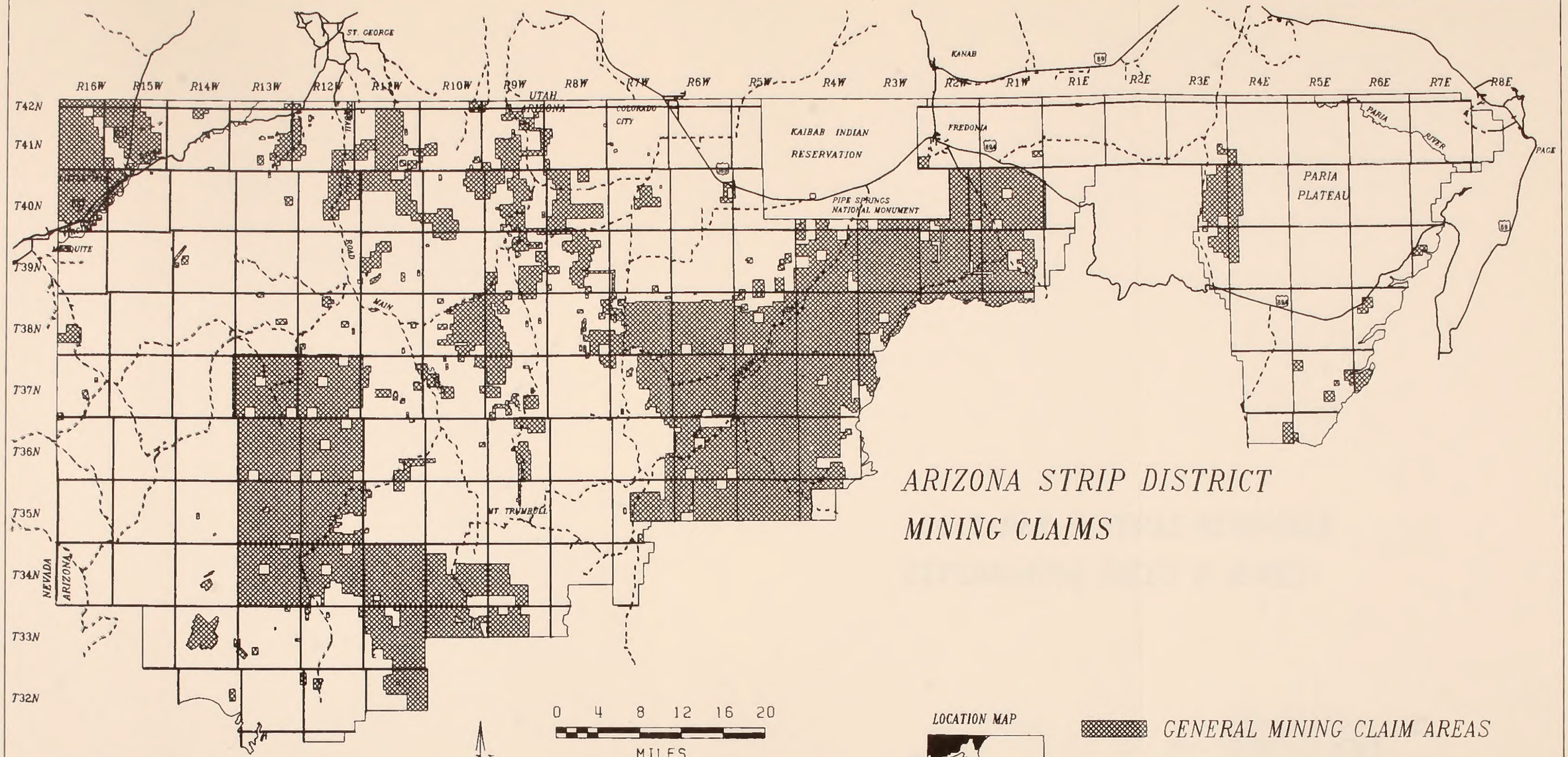


STATE OF ARIZONA

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





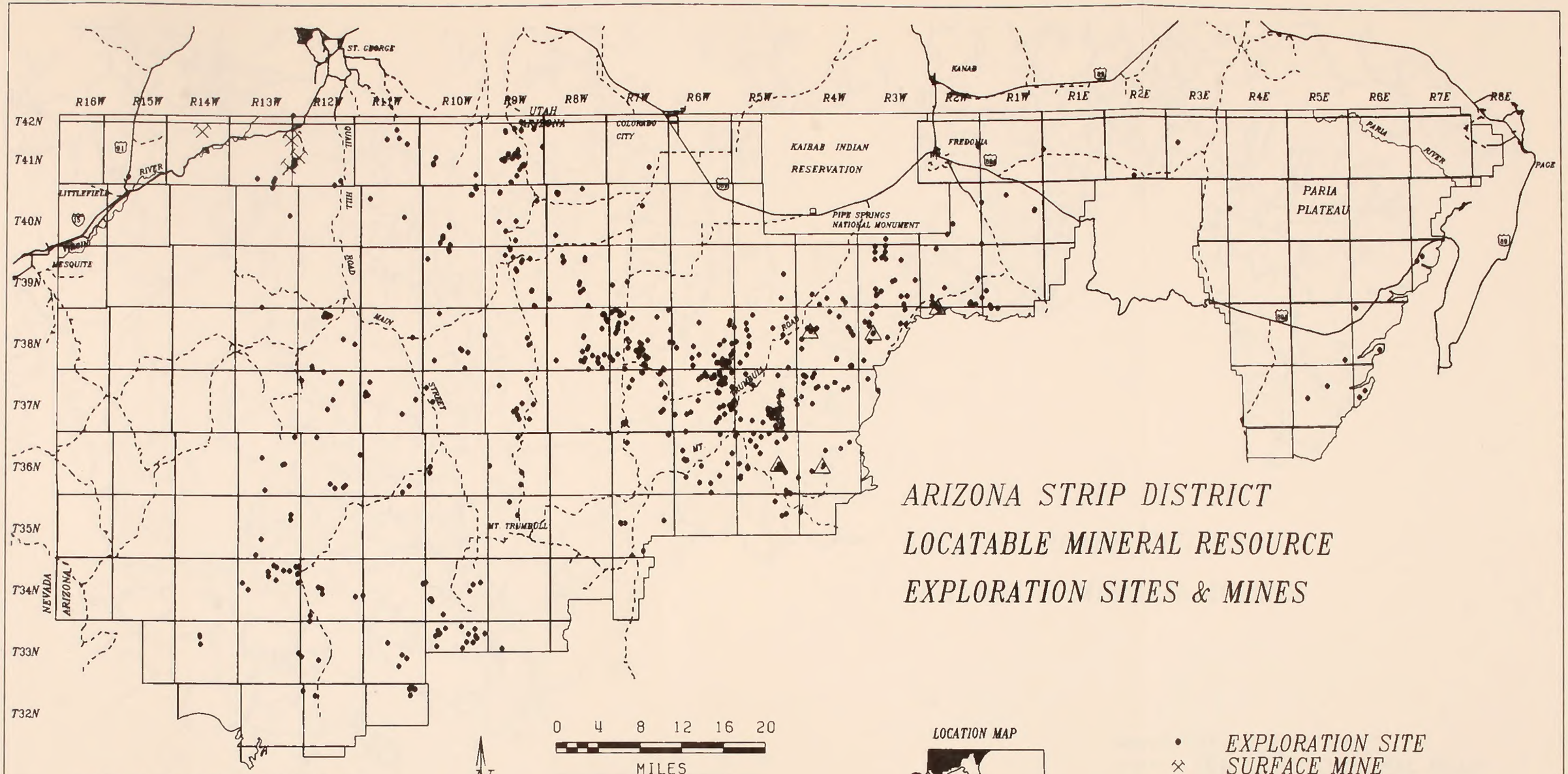
ARIZONA STRIP DISTRICT
MINING CLAIMS

GENERAL MINING CLAIM AREAS

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



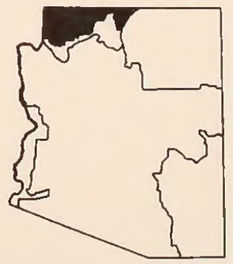


ARIZONA STRIP DISTRICT
LOCATABLE MINERAL RESOURCE
EXPLORATION SITES & MINES

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

——— *DISTRICT BOUNDARY*
——— *PAVED HIGHWAY*
- - - - - - *PRIMARY UNPAVED ROAD*

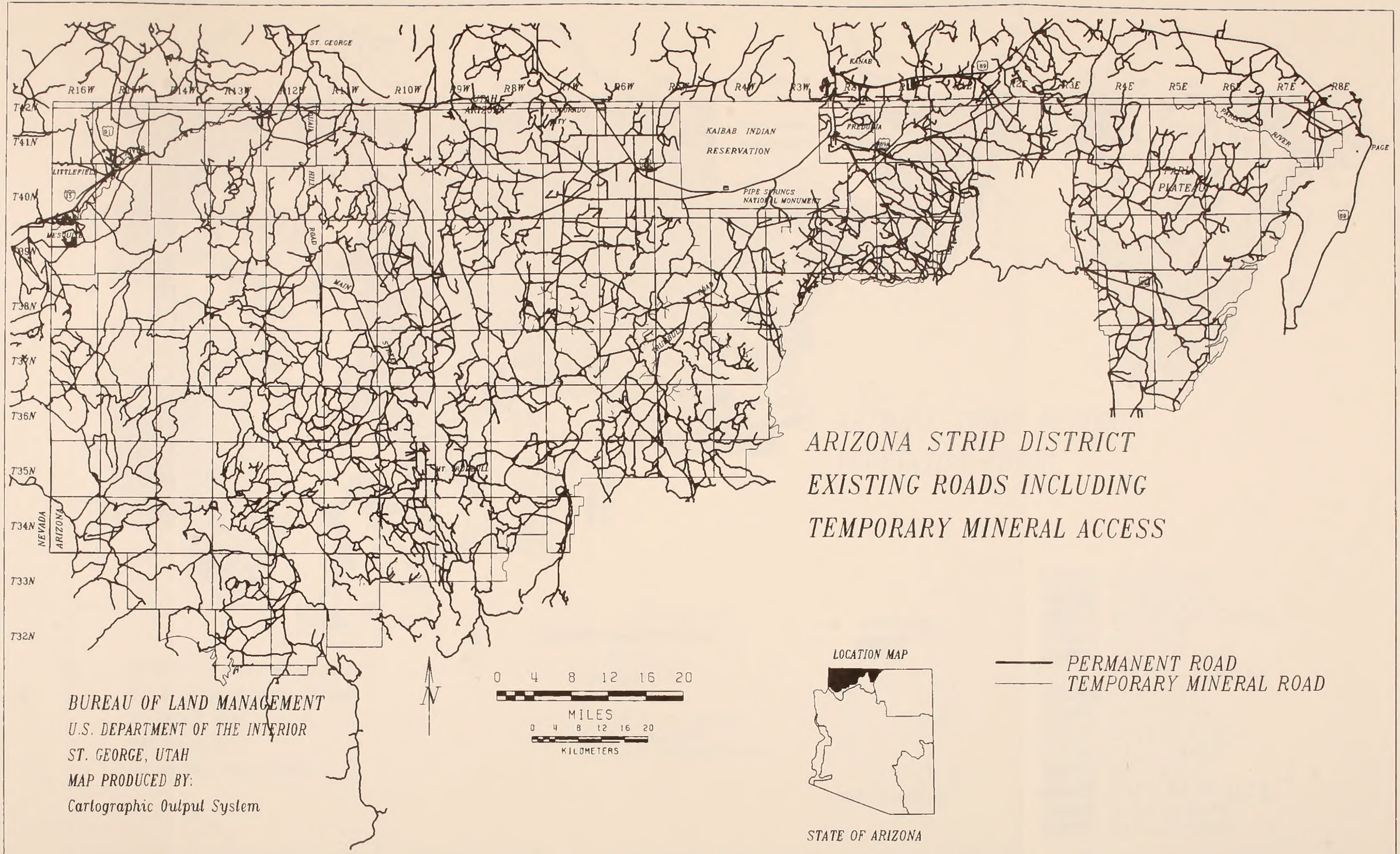
LOCATION MAP



STATE OF ARIZONA

• *EXPLORATION SITE*
⚒ *SURFACE MINE*
△ *SUBSURFACE MINE*





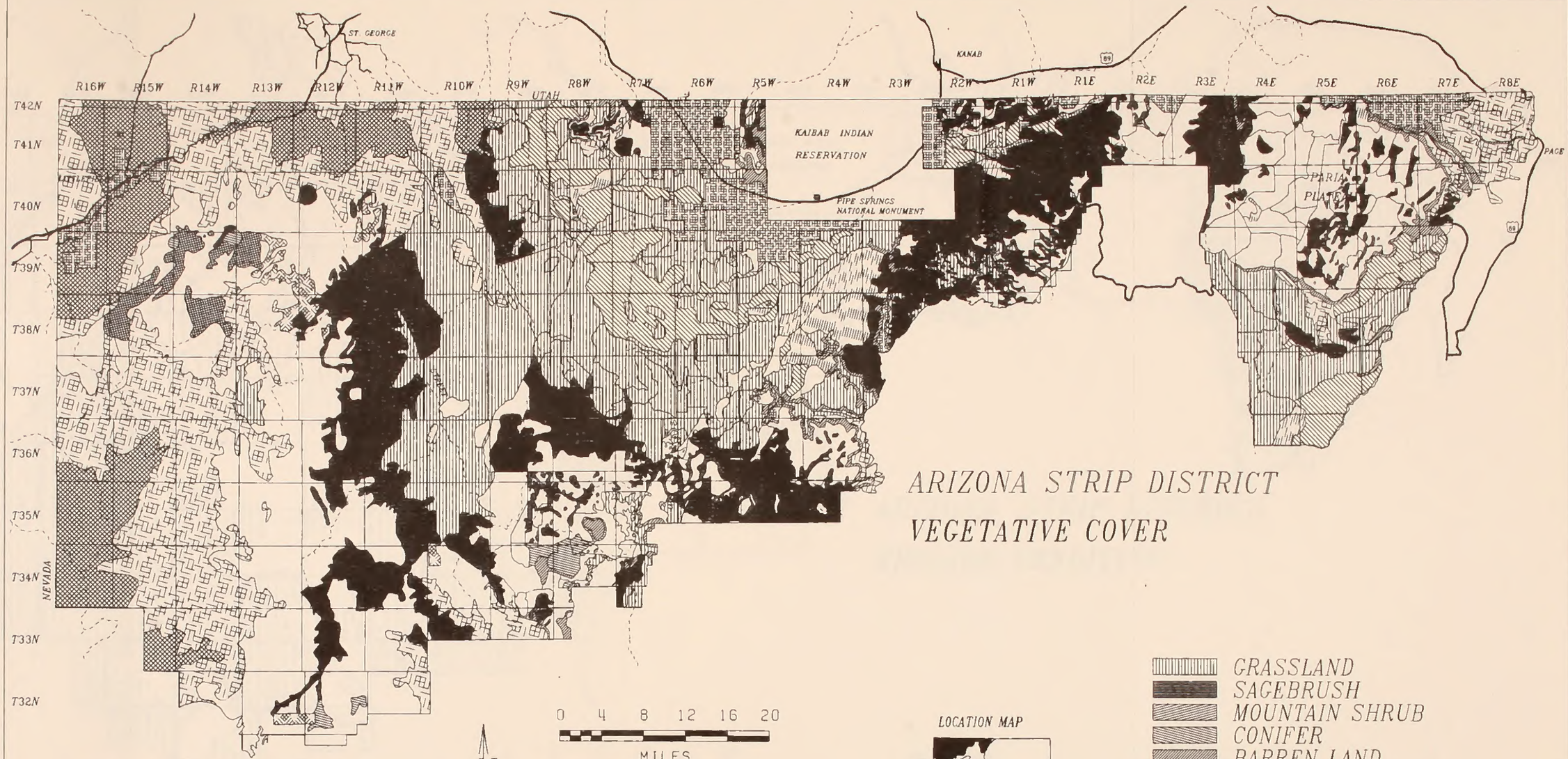
ARIZONA STRIP DISTRICT
EXISTING ROADS INCLUDING TEMPORARY MINERAL ACCESS

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

LOCATION MAP

STATE OF ARIZONA

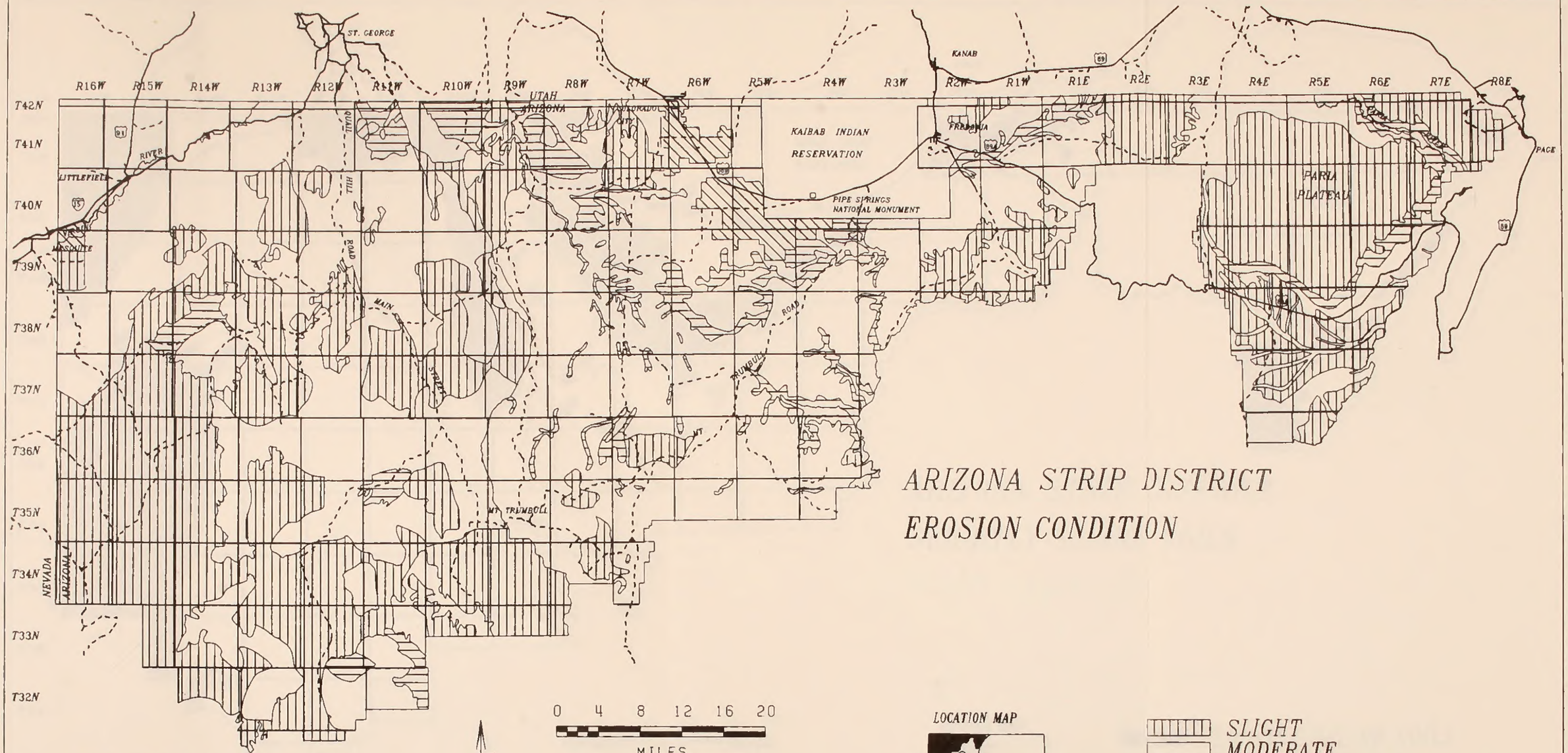
PERMANENT ROAD
TEMPORARY MINERAL ROAD



ARIZONA STRIP DISTRICT
VEGETATIVE COVER

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

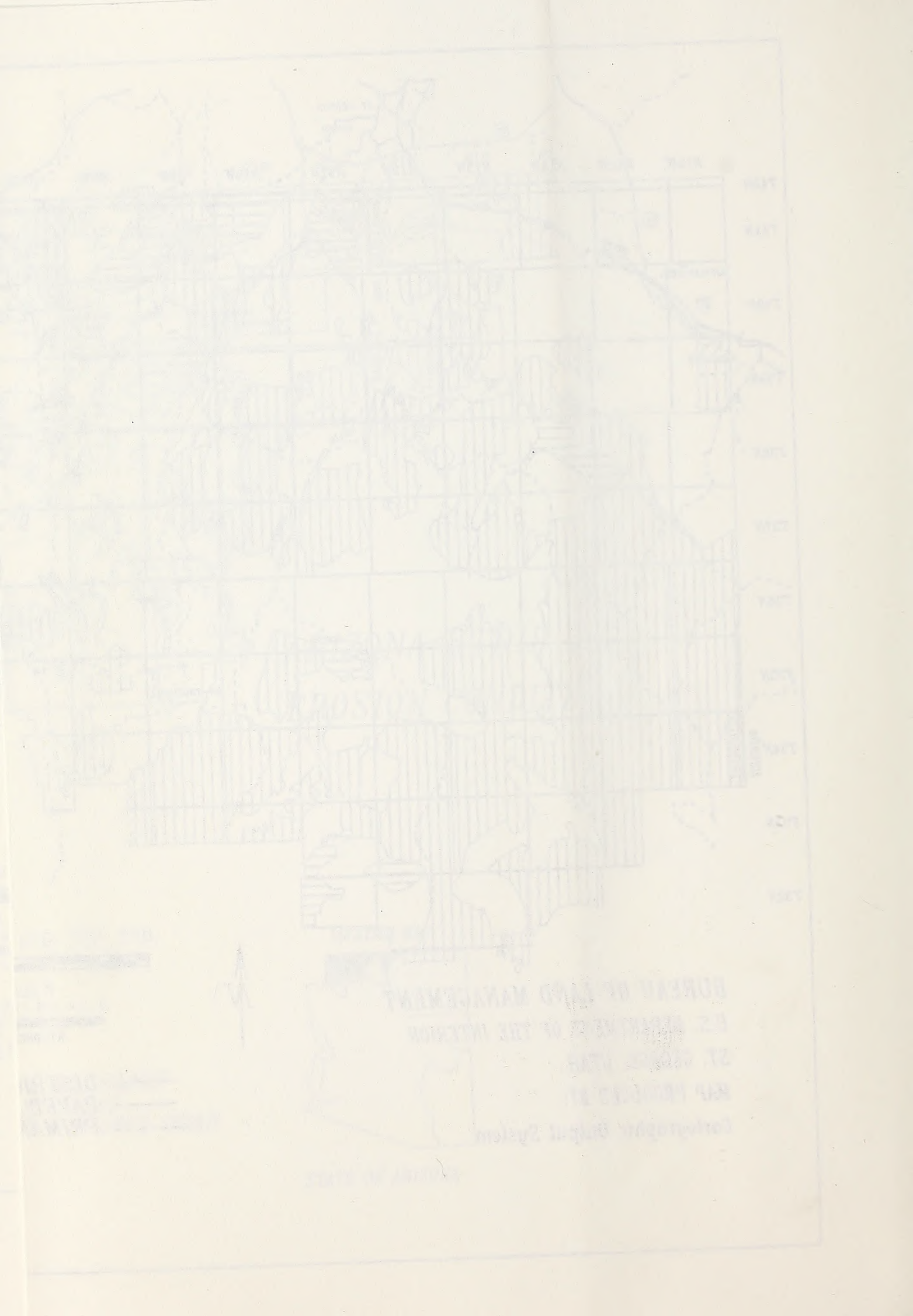


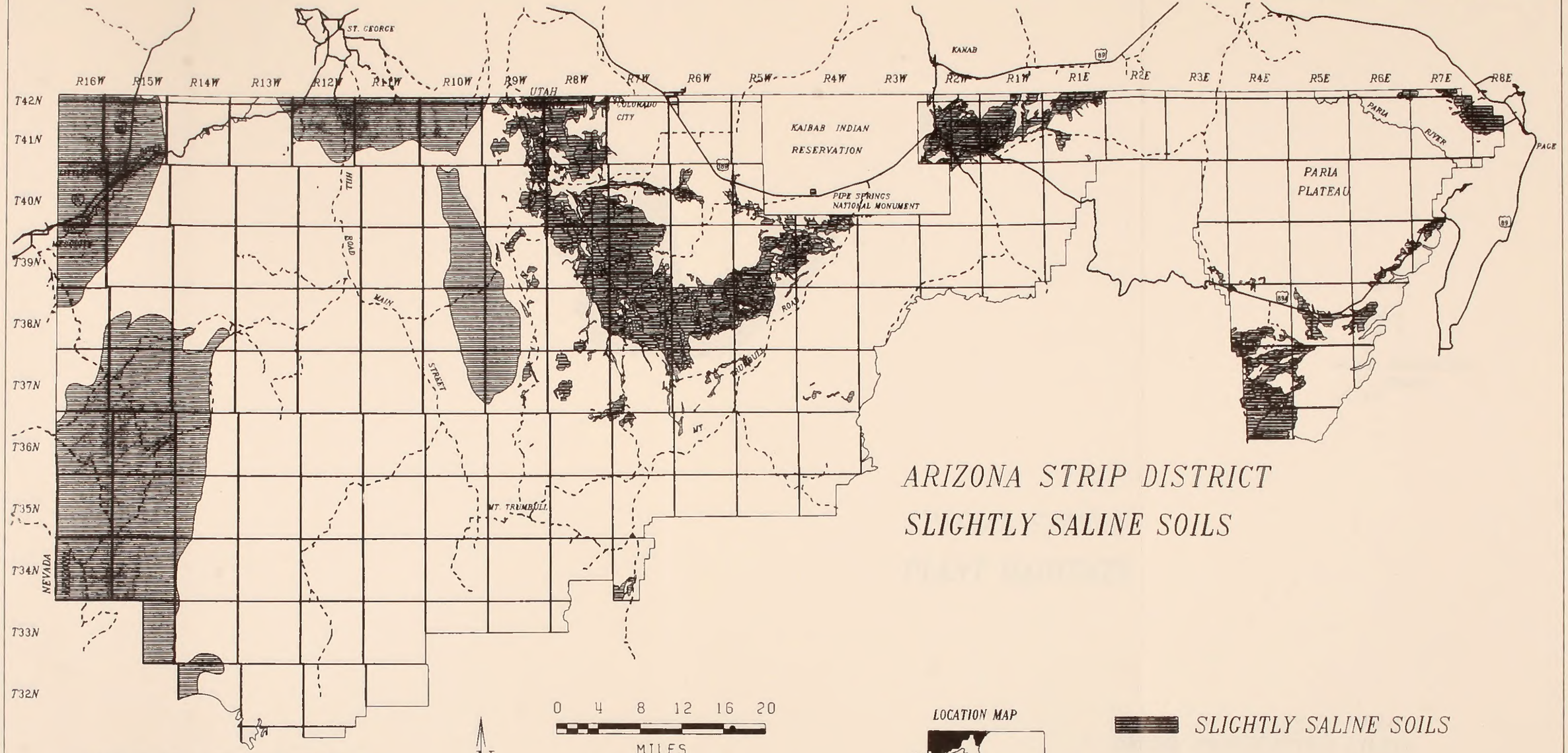


ARIZONA STRIP DISTRICT

EROSION CONDITION

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





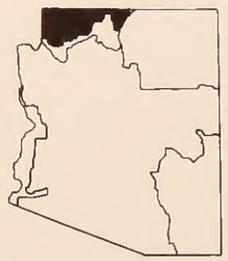
ARIZONA STRIP DISTRICT

SLIGHTLY SALINE SOILS

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

——— *DISTRICT BOUNDARY*
——— *PAVED HIGHWAY*
- - - - - *PRIMARY UNPAVED ROAD*

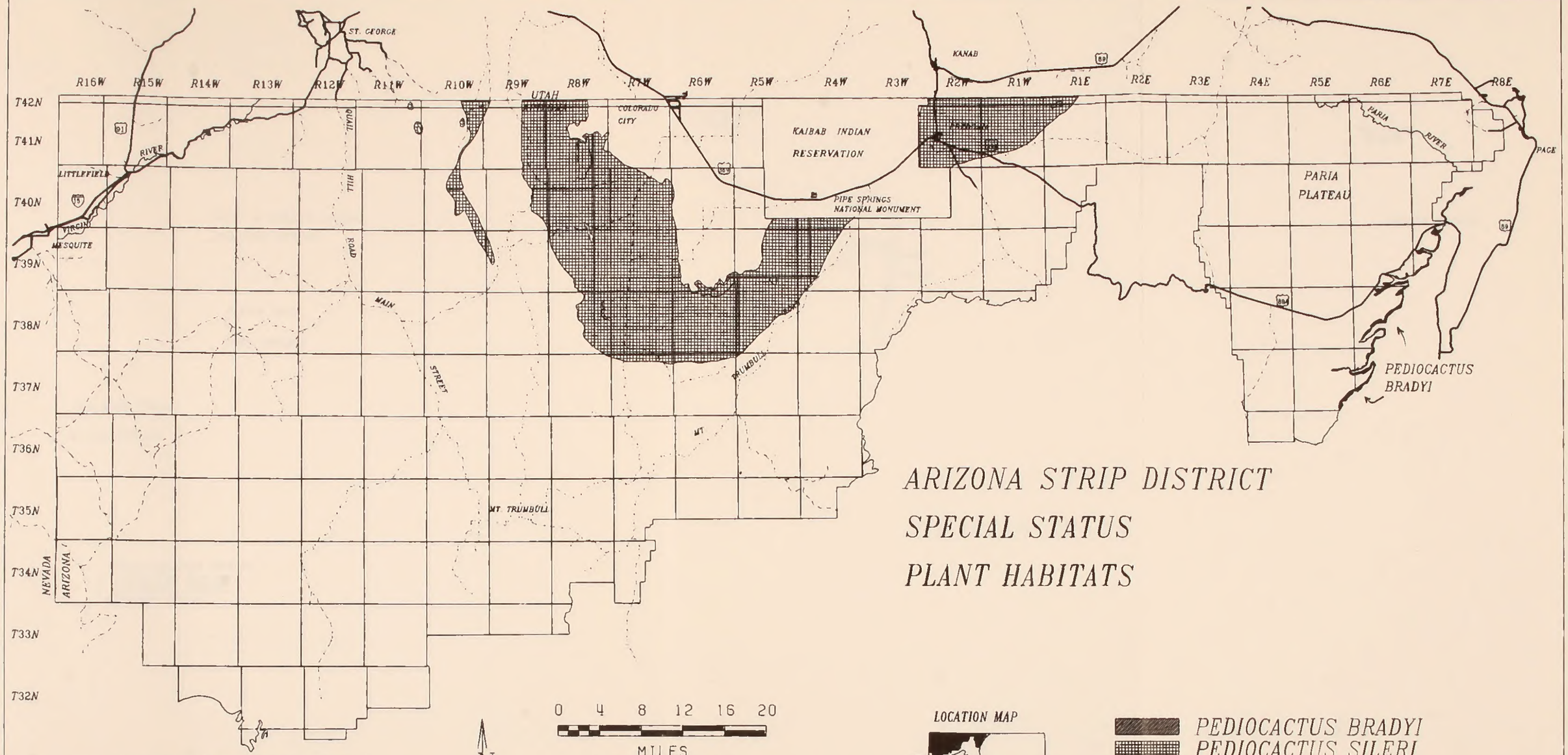
LOCATION MAP



STATE OF ARIZONA

SLIGHTLY SALINE SOILS

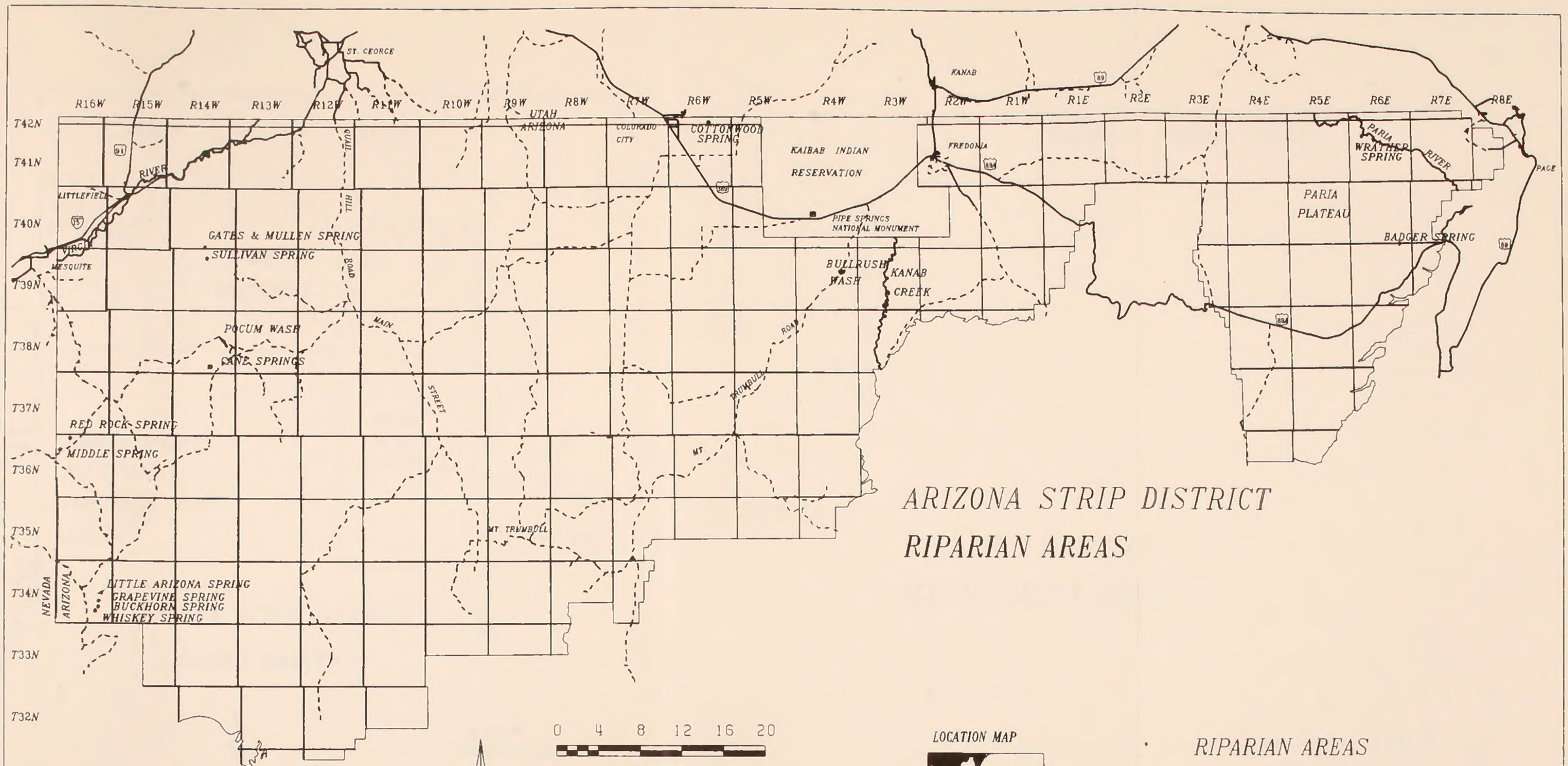




ARIZONA STRIP DISTRICT
SPECIAL STATUS
PLANT HABITATS

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

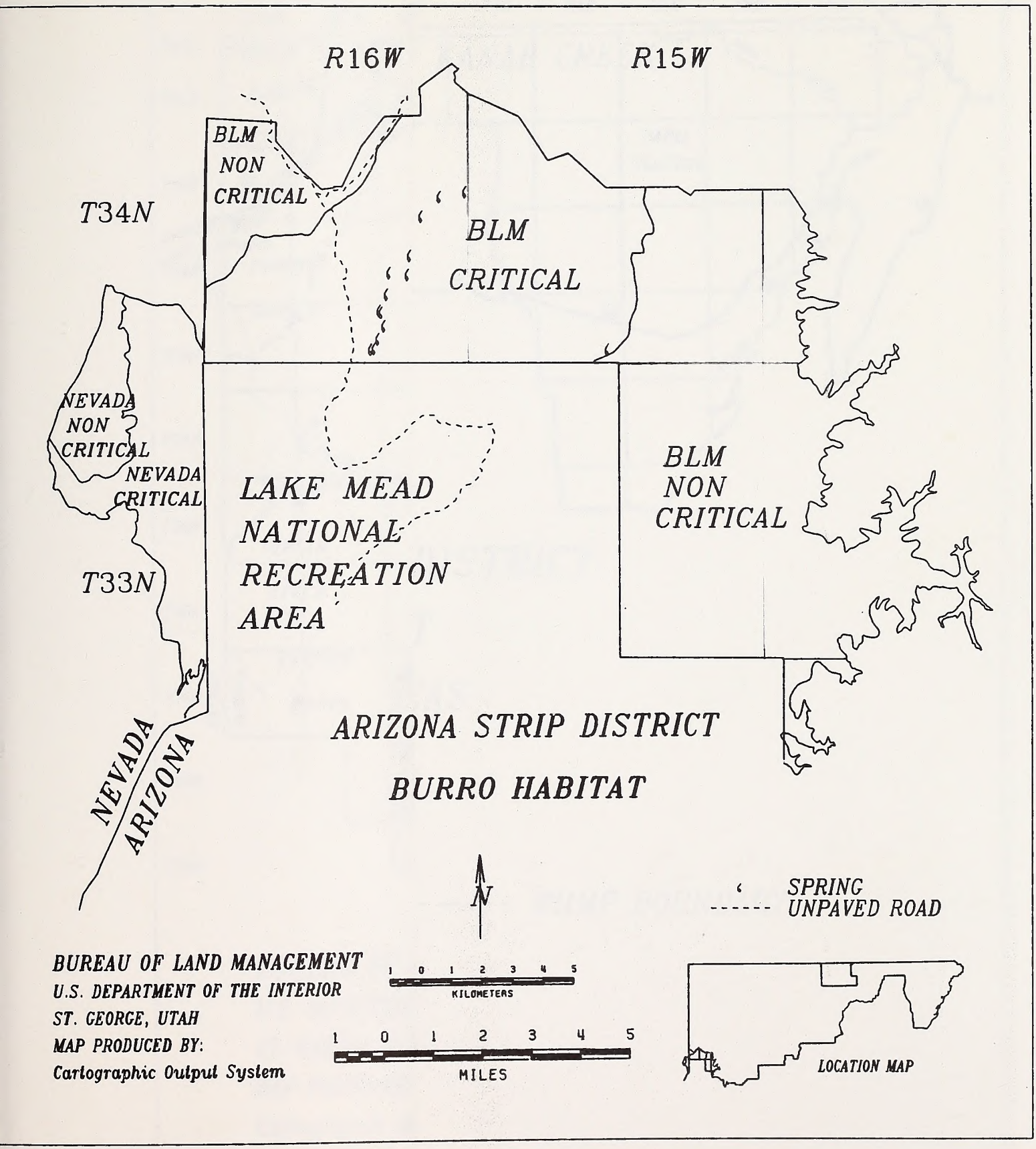


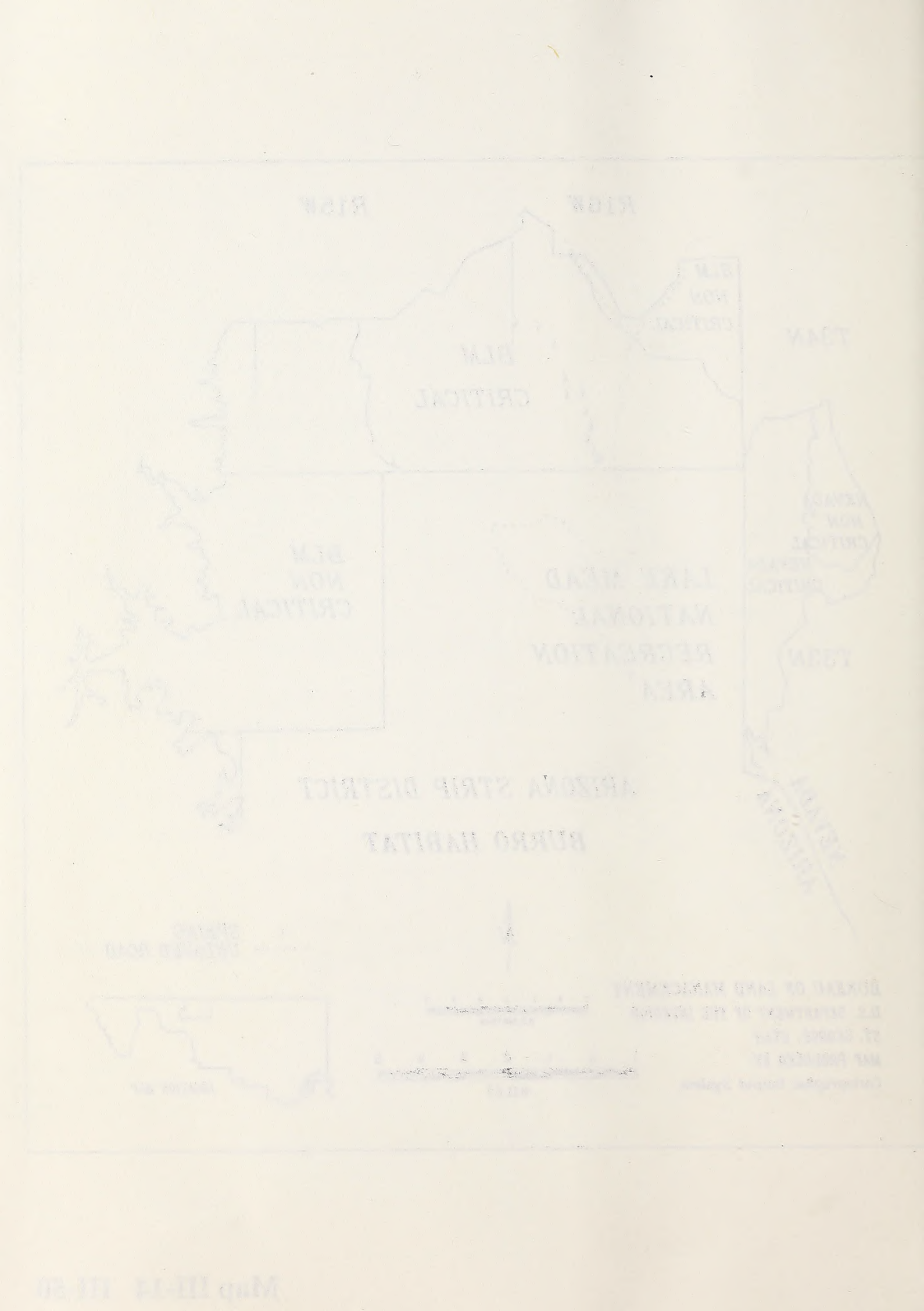


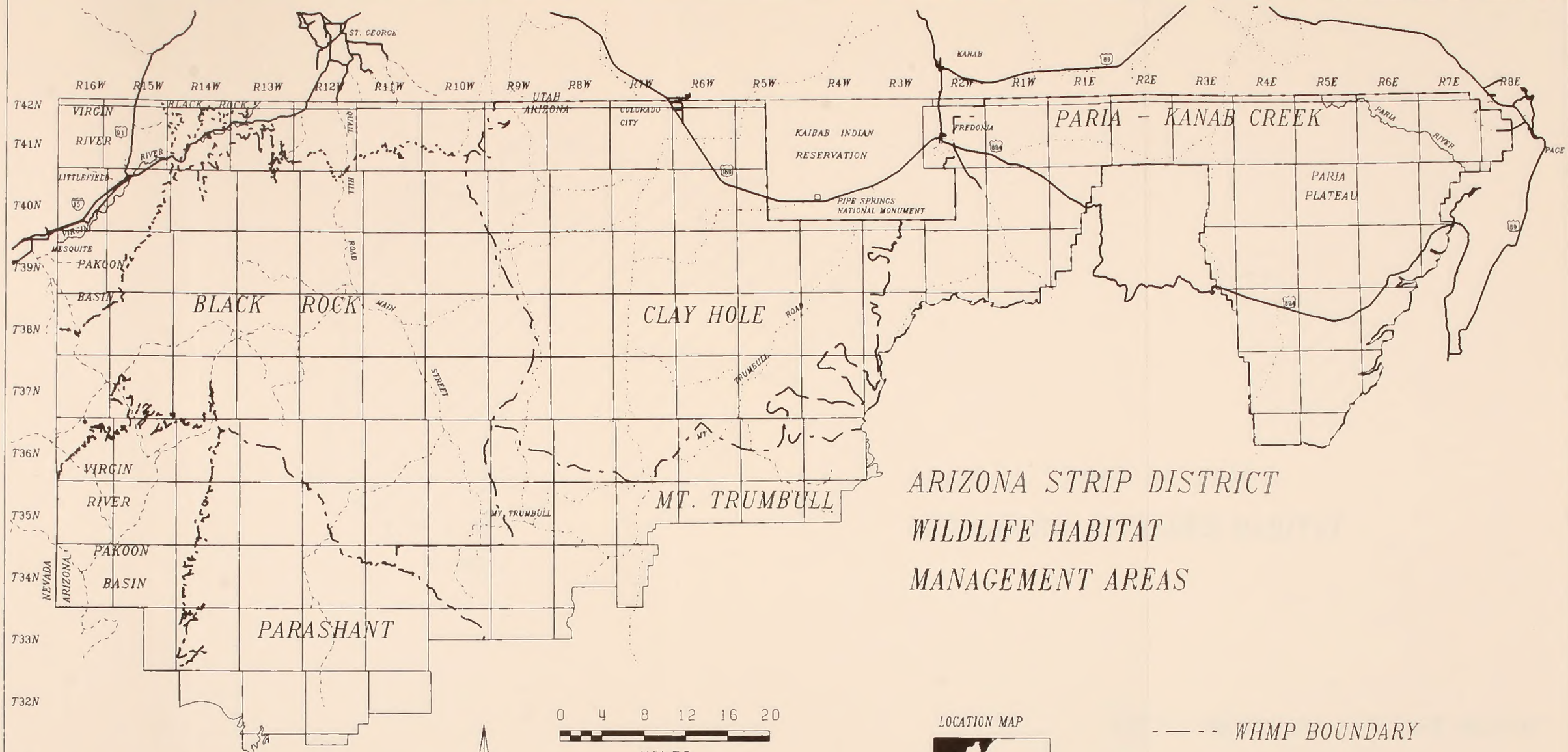
ARIZONA STRIP DISTRICT

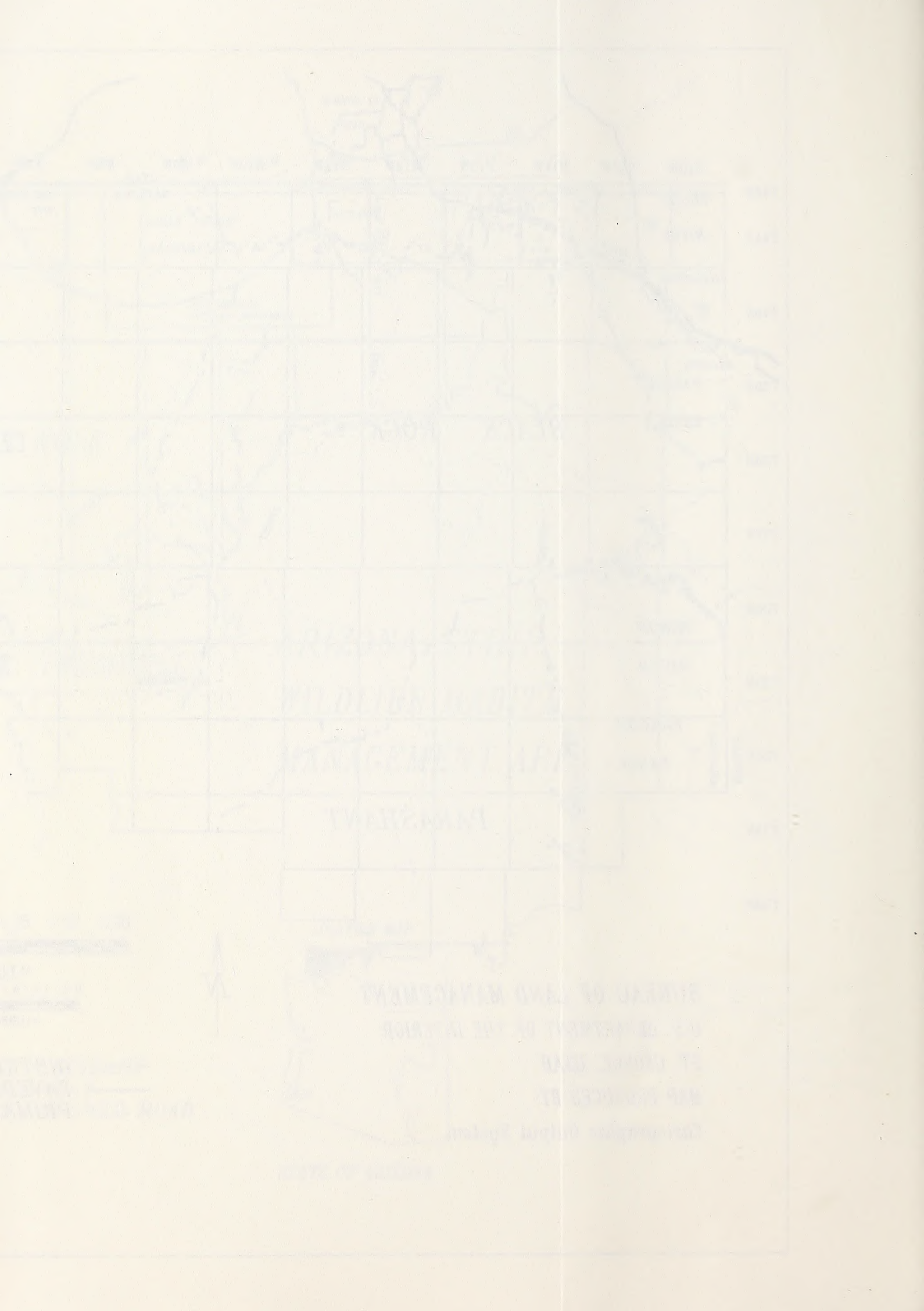
RIPARIAN AREAS

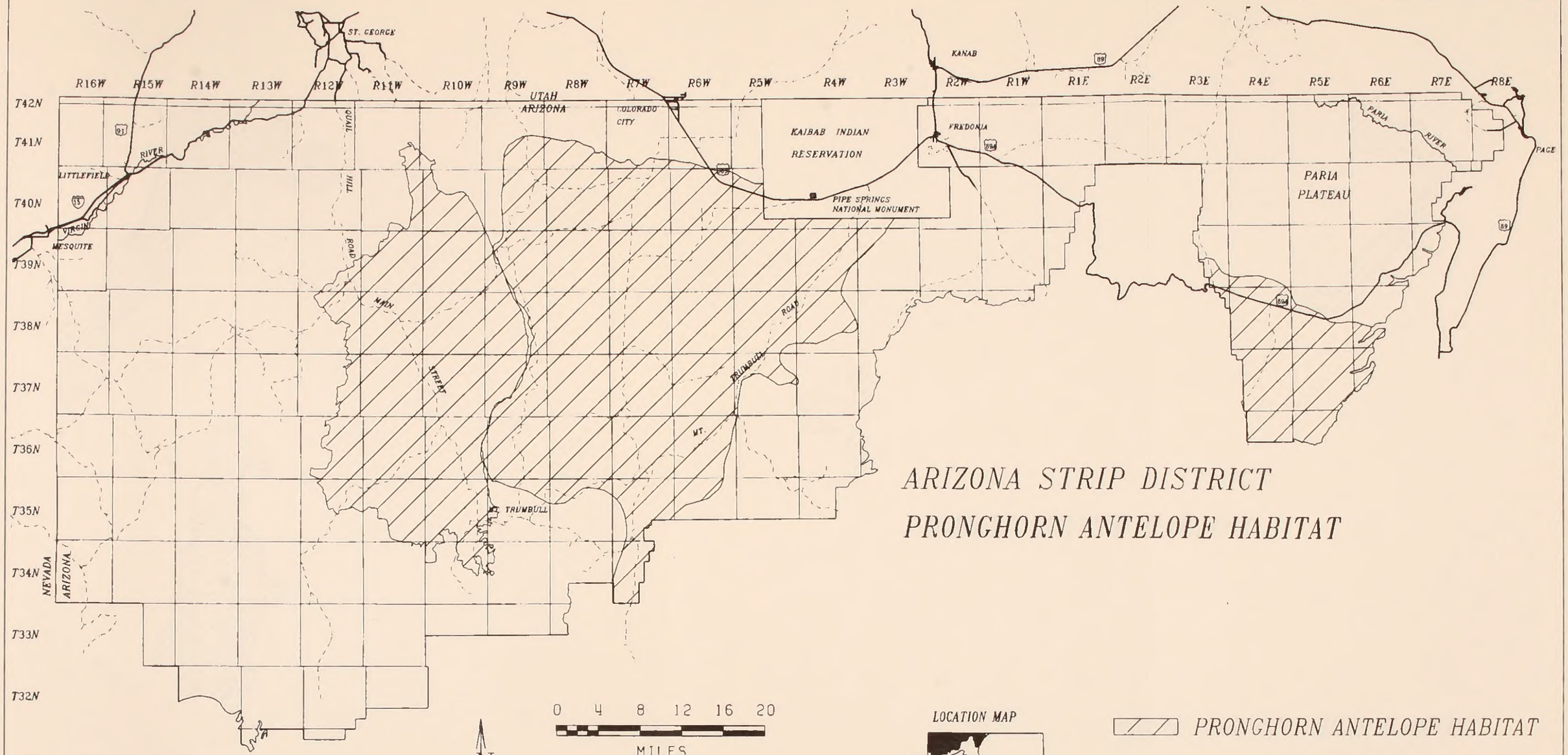
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System


R16W
R15W
BLM
NON
CRITICAL
T34N
BLM
CRITICAL
NEVADA
NON
CRITICAL
NEVADA
CRITICAL
LAKE MEAD
NATIONAL
RECREATION
AREA
BLM
NON
CRITICAL
T33N
NEVADA
ARIZONA
ARIZONA STRIP DISTRICT
BURRO HABITAT
N
SPRING
UNPAVED ROAD
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System
1 0 1 2 3 4 5
KILOMETERS
1 0 1 2 3 4 5
MILES
LOCATION MAP




ST. GEORGE
KANAB
R16W R15W R14W R13W R12W R11W R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E
T42N
T41N
T40N
T39N
T38N
T37N
T36N
T35N
T34N
T33N
T32N
VIRGIN RIVER
BLACK ROCK
UTAH
ARIZONA
COLORADO CITY
KAIBAB INDIAN RESERVATION
FREDONIA
PARIA - KANAB CREEK
PARIA RIVER
PARIA PLATEAU
PACE
LITTLEFIELD
MESQUITE
PIPE SPRINGS NATIONAL MONUMENT
HILL ROAD
PAKOON BASIN
BLACK ROCK
MAIN STREET
CLAY HOLE
ROAD
TRUMBULL
MT.
MT. TRUMBULL
VIRGIN RIVER
PAKOON BASIN
NEVADA
ARIZONA
PARASHANT
ARIZONA STRIP DISTRICT
WILDLIFE HABITAT
MANAGEMENT AREAS
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System
N
0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS
DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD
LOCATION MAP
STATE OF ARIZONA
WHMP BOUNDARY





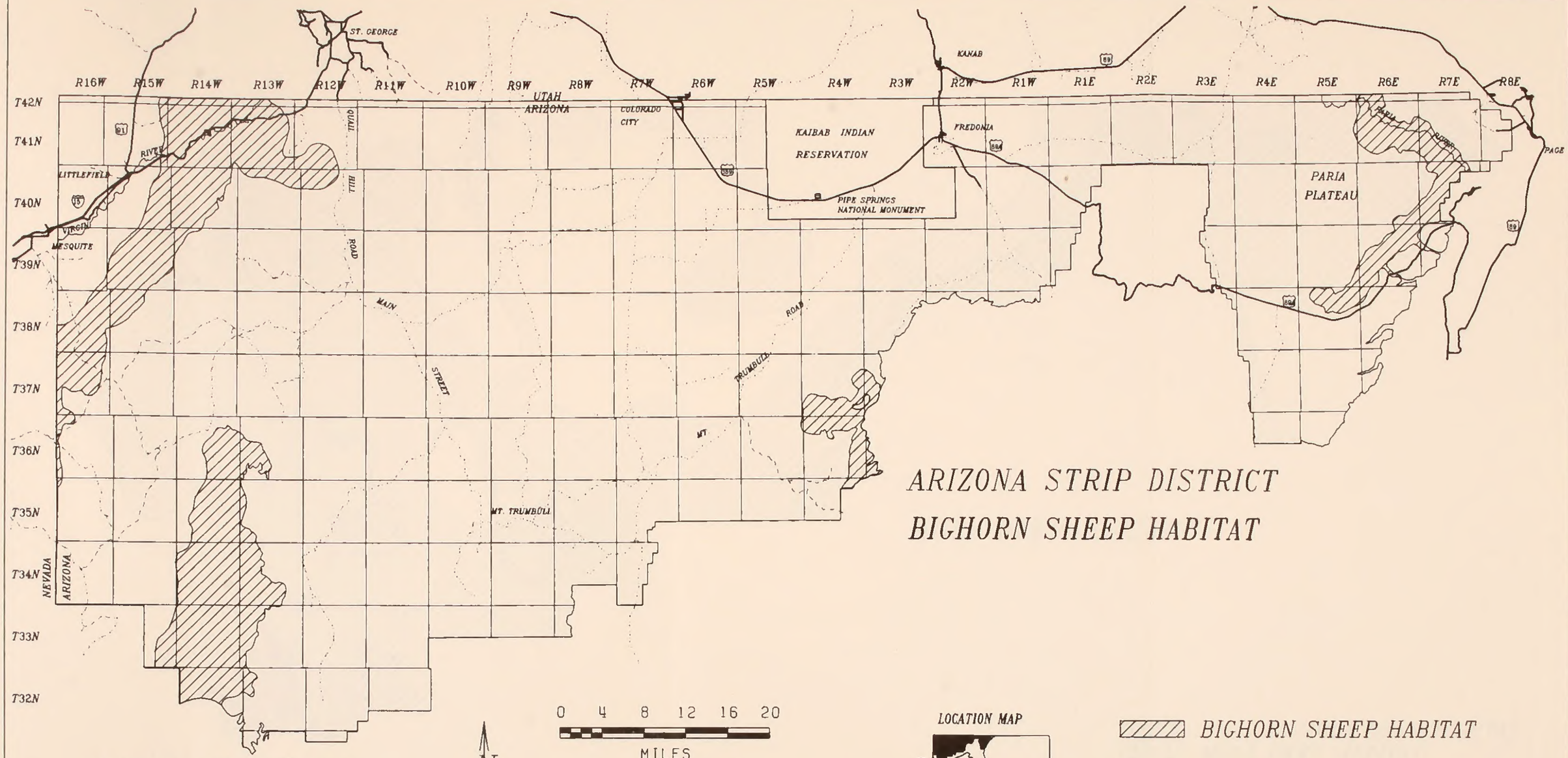
ARIZONA STRIP DISTRICT
PRONGHORN ANTELOPE HABITAT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

PRONGHORN ANTELOPE HABITAT





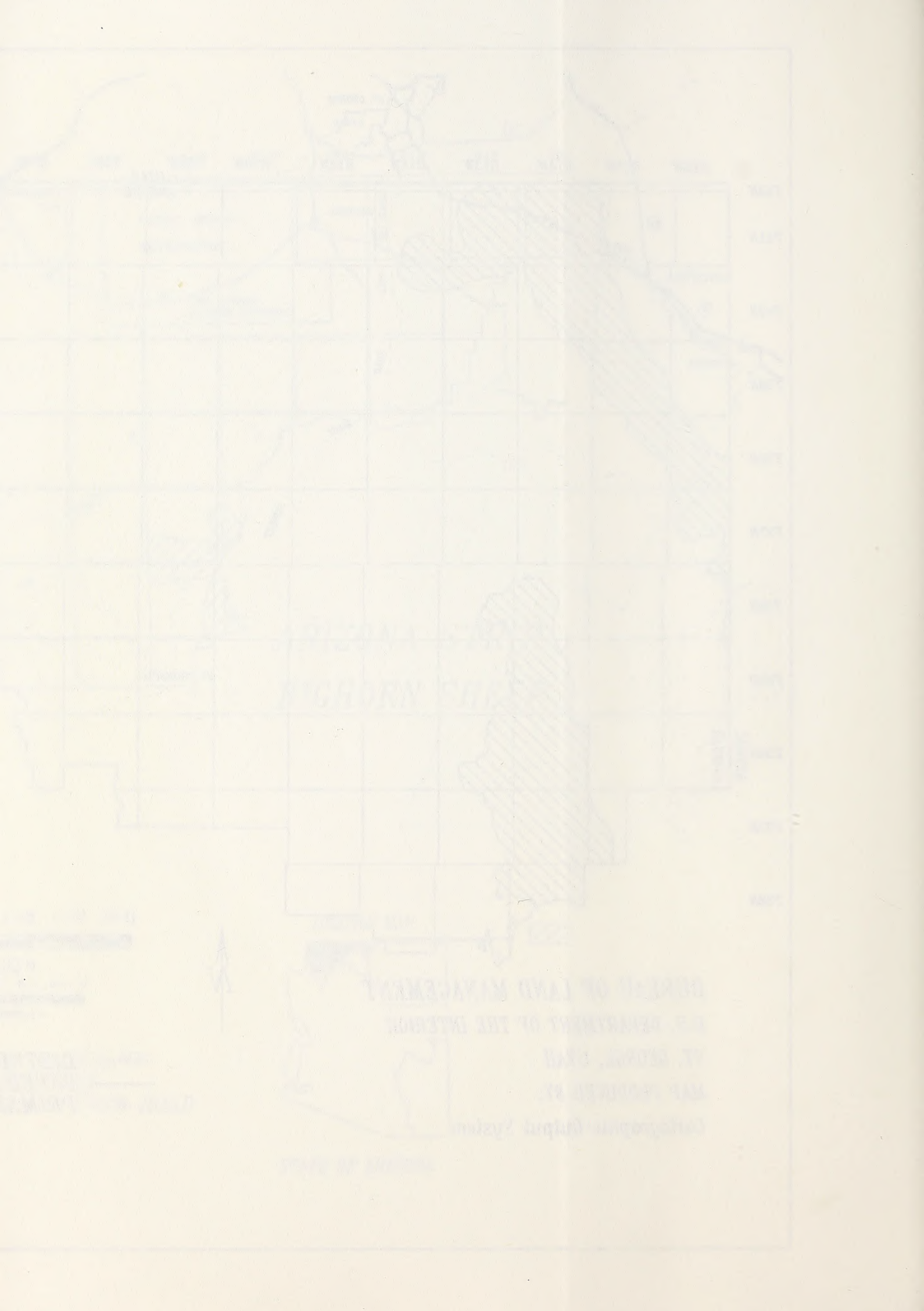
ARIZONA STRIP DISTRICT
BIGHORN SHEEP HABITAT

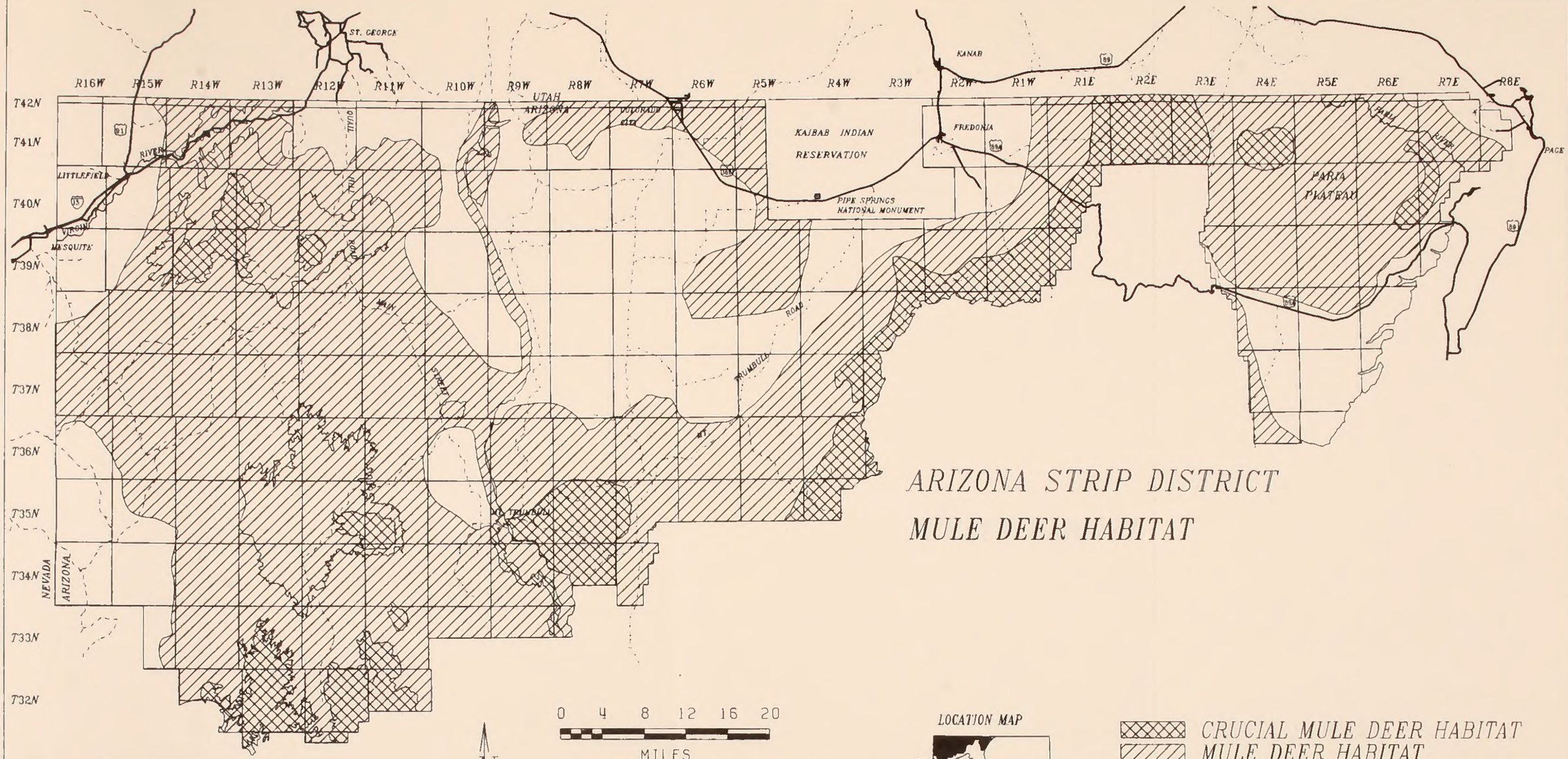
BIGHORN SHEEP HABITAT

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

STATE OF ARIZONA

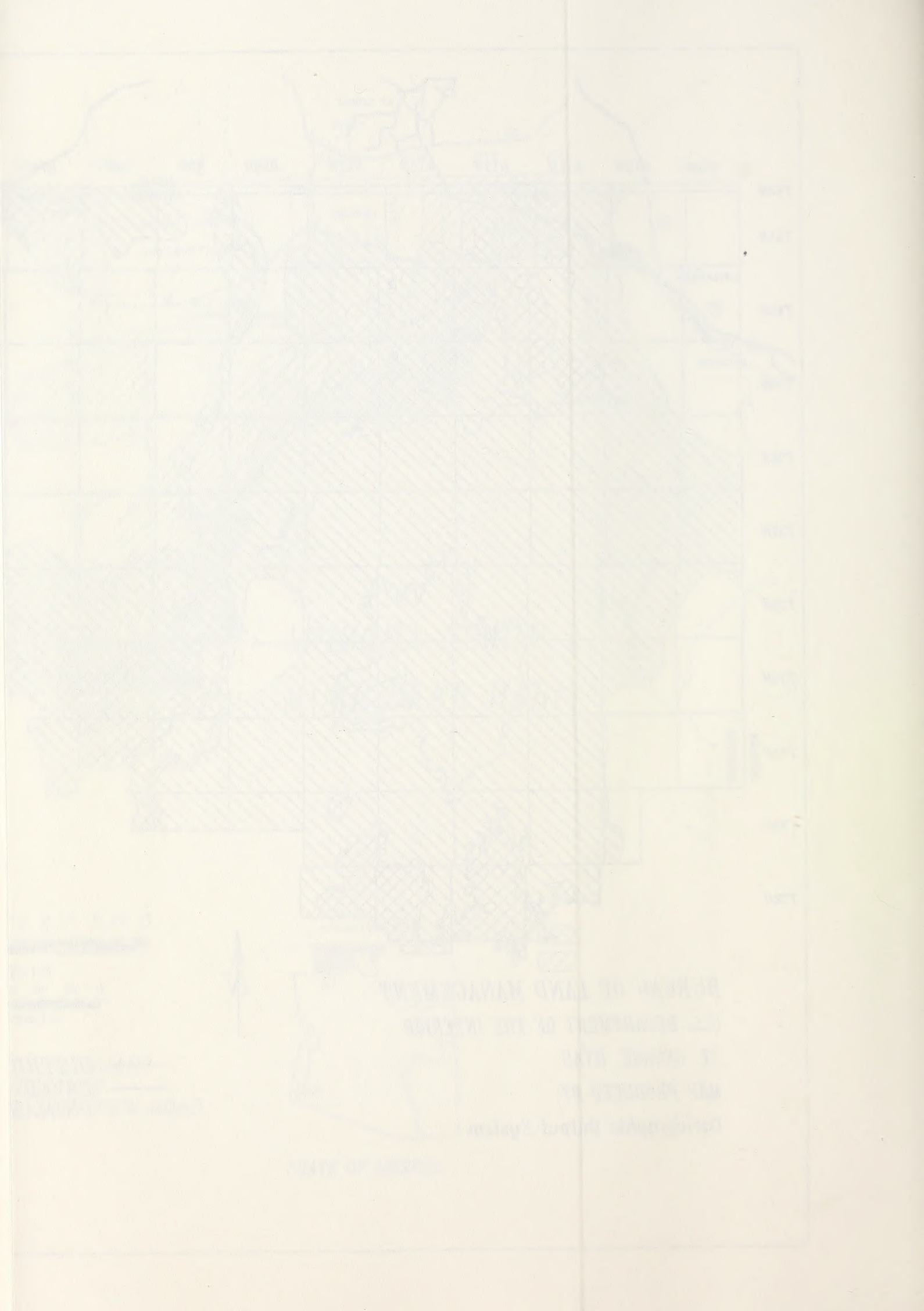
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

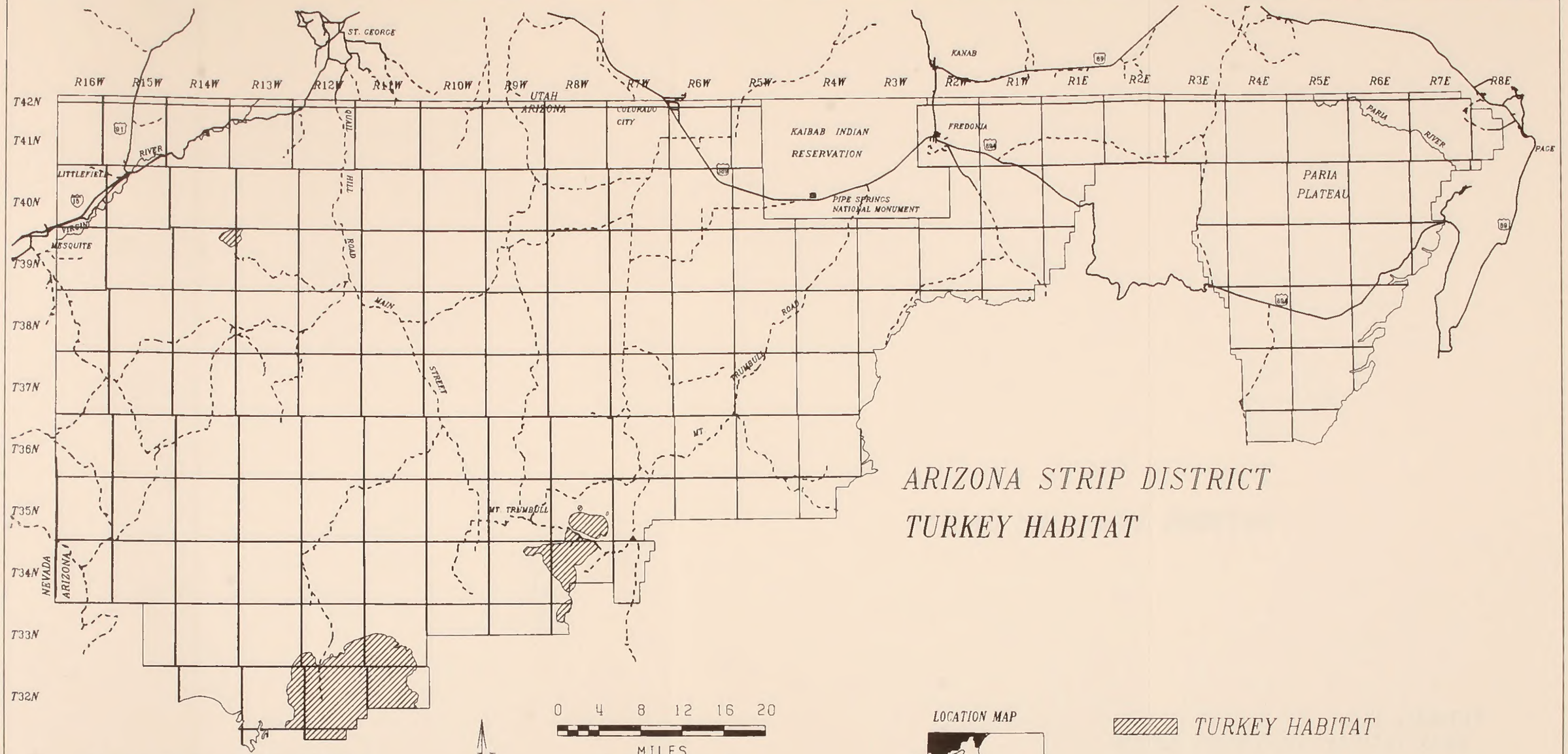




ARIZONA STRIP DISTRICT
MULE DEER HABITAT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System



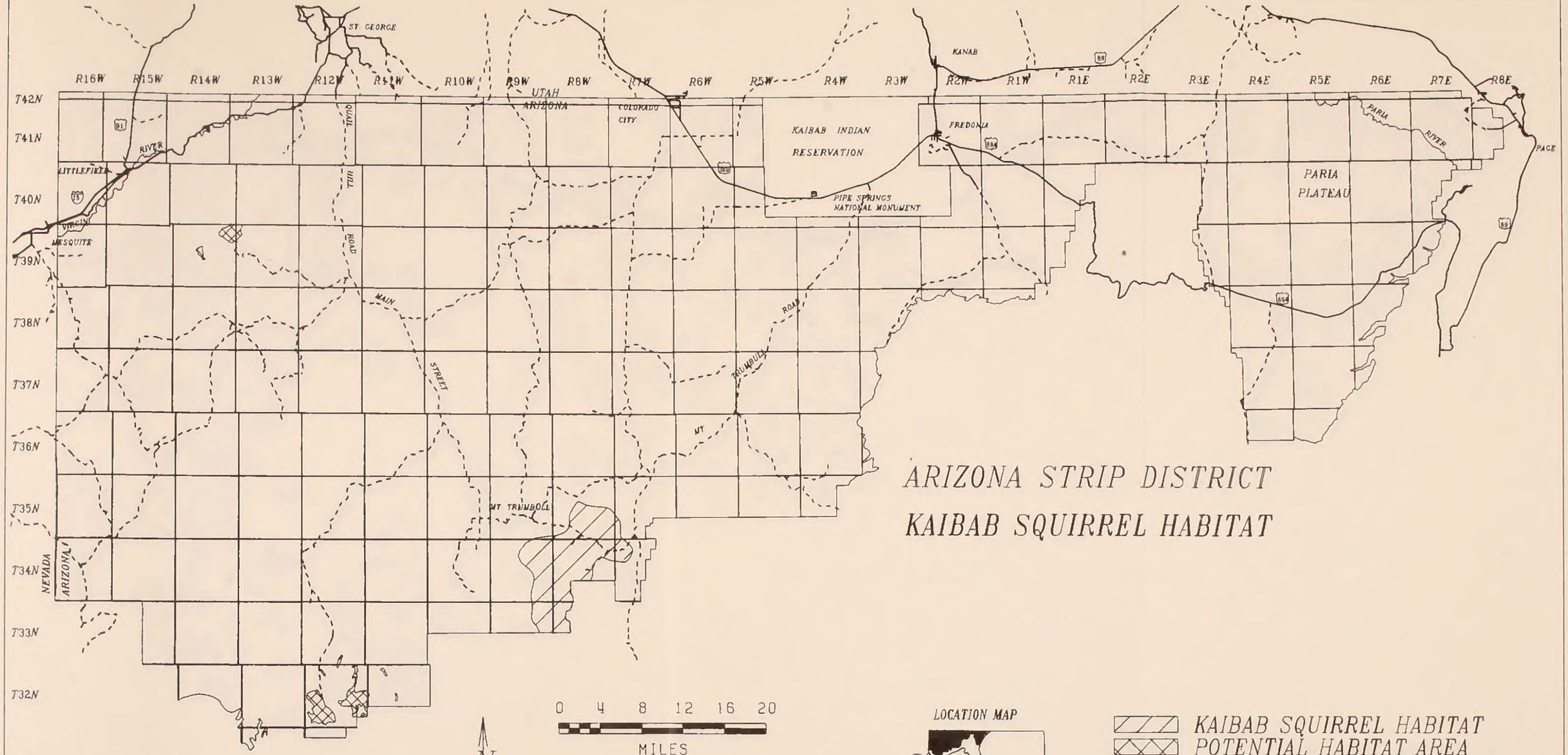


ARIZONA STRIP DISTRICT

TURKEY HABITAT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

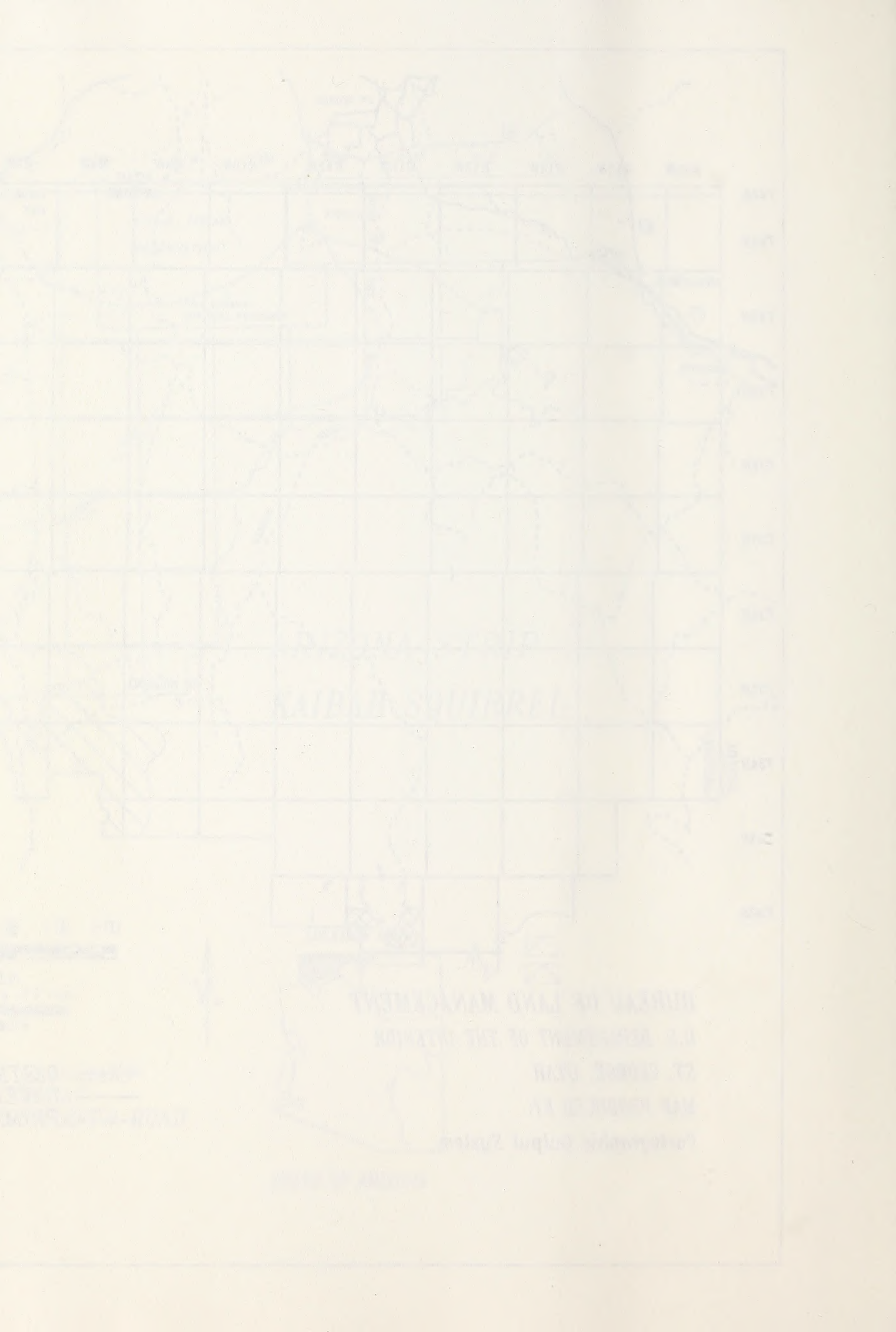


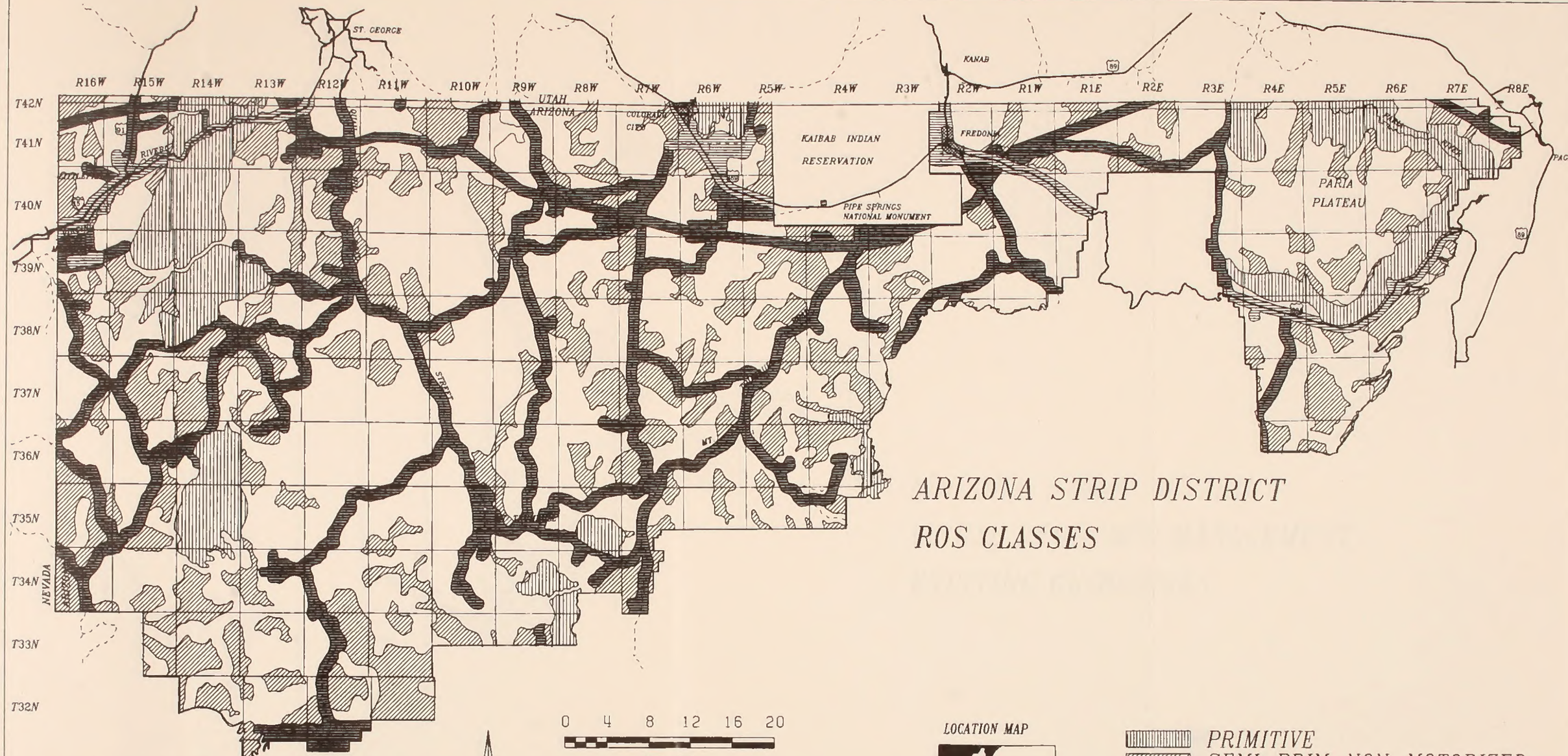


ARIZONA STRIP DISTRICT

KAIBAB SQUIRREL HABITAT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

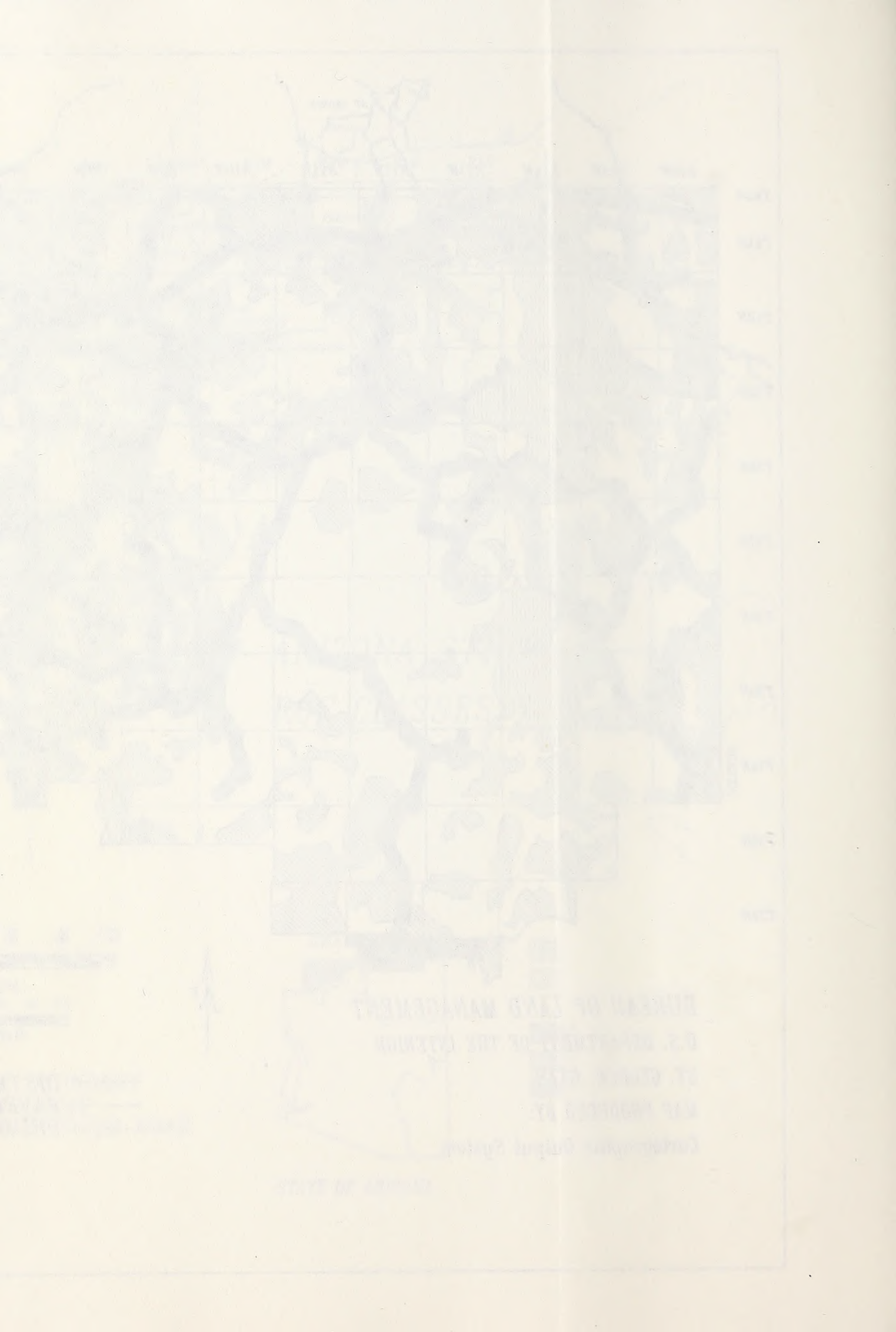


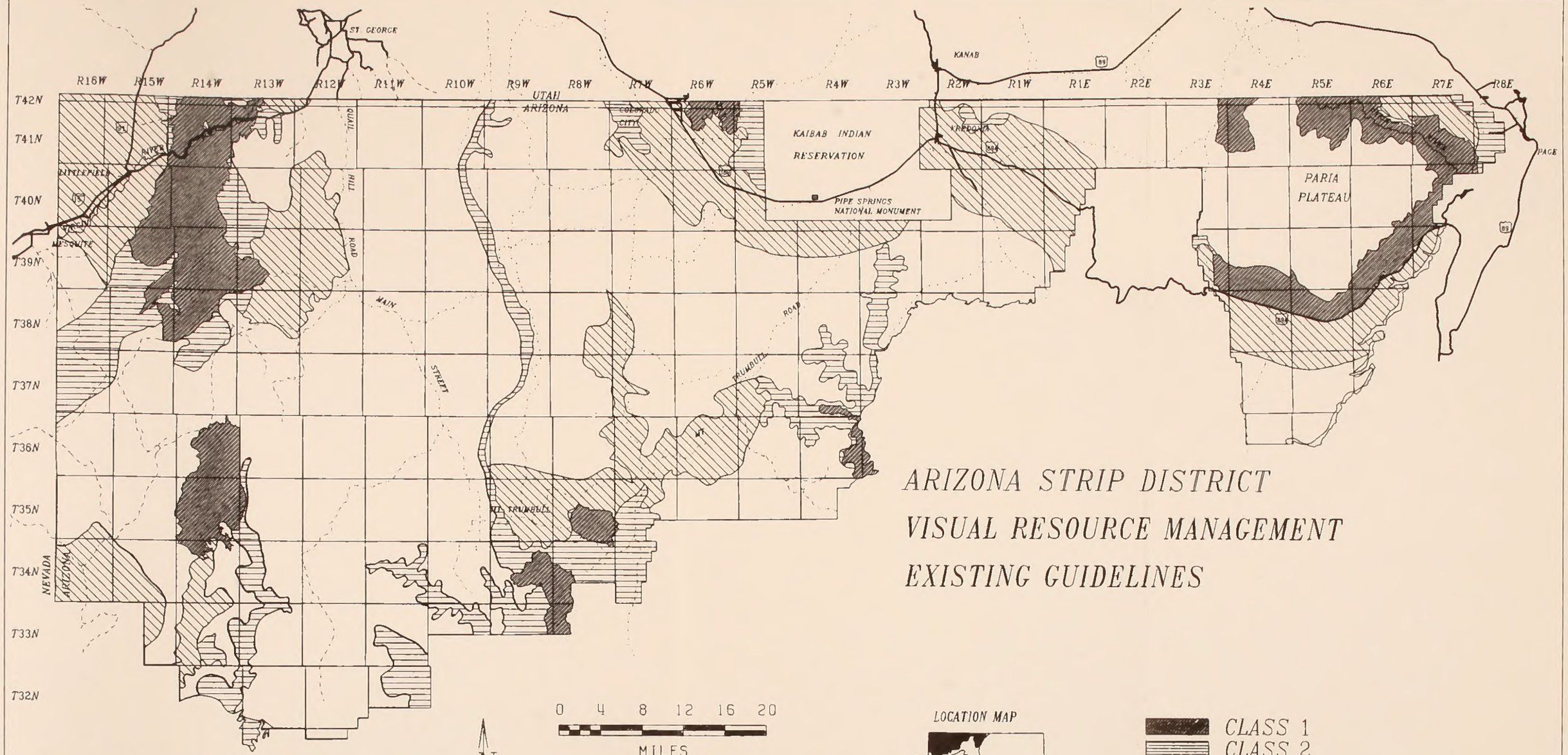


ARIZONA STRIP DISTRICT

ROS CLASSES

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





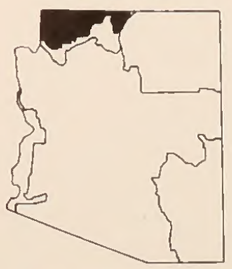
ARIZONA STRIP DISTRICT
VISUAL RESOURCE MANAGEMENT
EXISTING GUIDELINES

0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS

N

DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

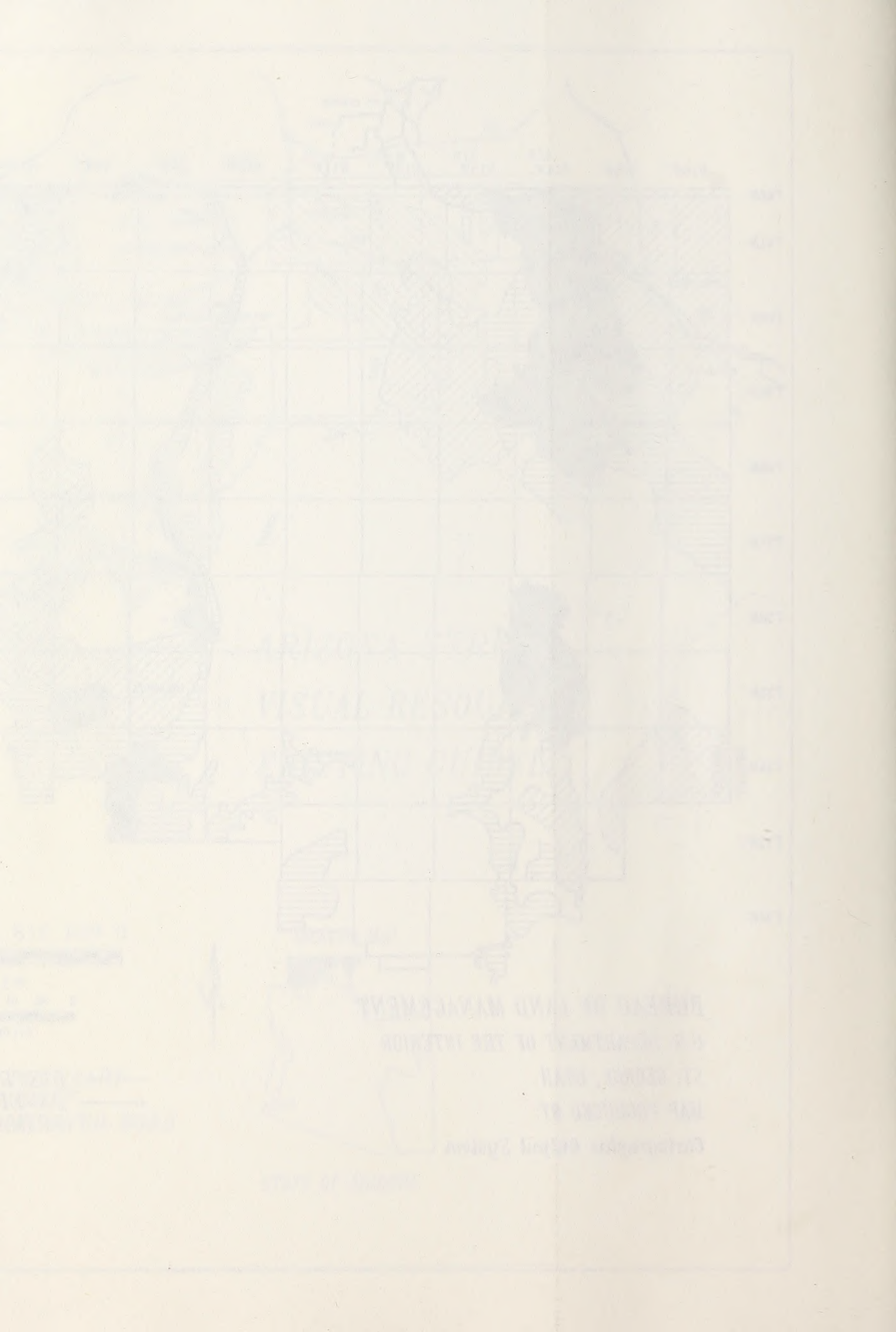
LOCATION MAP

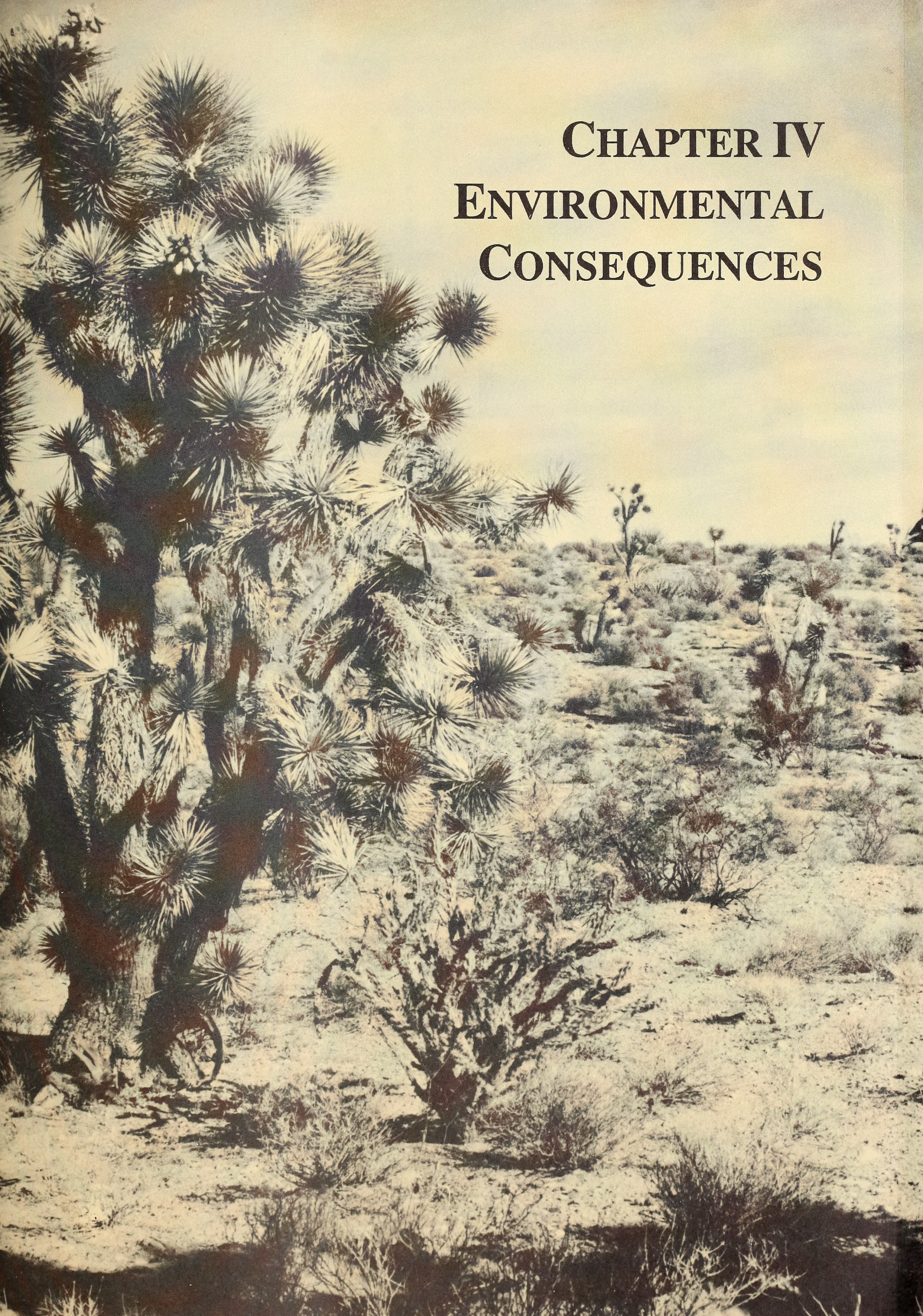


STATE OF ARIZONA

CLASS 1
CLASS 2
CLASS 3
CLASS 4

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System





CHAPTER IV
ENVIRONMENTAL CONSEQUENCES

CHAPTER IV
ENVIRONMENTAL CONSEQUENCES

IMPACTS TO LAND RESOURCES

FROM LAND RESOURCES

- Ownership Adjustments

Under the proposed plan, 25,188 acres of public lands would be made available for exchange, sale, or Recreation and Public Purposes Act (R&PP) leases or grants. These adjustments would ensure that lands are provided to accommodate community growth. Making more land available for ownership adjustments than under current management would benefit the local communities to a very high degree. Land exchanges would add lands with higher or more diverse resource values to public ownership.

Acquisition of 183,400 acres of state and private lands and subsurface estate would further consolidate blocks of public lands. This would allow more efficient and consistent management of resources. It would also eliminate the need for public land users to deal with two separate government agencies for the same use.

- Airports

Administering existing airports and providing land to expand the Colorado City airport would serve local economies. Since additional information is required to analyze a possible airport site in Ferry Swale, a separate NEPA compliance action would be made regarding this issue.

- Communication Sites

Seegmiller Mountain and Point of the Rock would be established as the new communication sites to which future proponents would be directed. Once developed, the Seegmiller site could enhance local or regional telecommunication capabilities for high power uses (i.e., television, radio, radar, etc.). Proposals for communications sites elsewhere in the district would continue to be considered on a case-by-case basis, except in the Moccasin Mountains, which would not be open to such use. Case-by-case consideration would benefit other proponents to a high degree if the designated site on Seegmiller Mountain proved inadequate for their needs.

- Withdrawals

Reviewing all existing withdrawals in the district and considering them for restoration to the public land laws if it is determined they are no longer needed for withdrawal purposes (i.e., public water reserves, Grand Canyon Game Preserve, Nixon Spring Administrative Site, Forest Service Big Springs Ranger District Administrative Site, and Federal Energy Regulatory Commission (FERC) power project withdrawals numbers 2469 and 4682) would be beneficial to district management programs.

Revocation of the Turbinella-Gambel Oak protective withdrawal would have a positive impact on the development of any locatable and leasable minerals which may underlie the tract. This withdrawal covers some 154 acres of land identified as having a moderate potential for the occurrence of oil and gas. Currently the area is withdrawn from mineral entry and leasing.

Revocation of the Virgin River scenic withdrawal would not change current mineral management because the land would remain closed to mineral activity due to wilderness designations.

Revocation of the Boulder Canyon withdrawal would have a positive effect on the development of any locatable minerals which may underlie the tract. Currently the area is withdrawn from mineral entry under a Bureau of Reclamation first form withdrawal that protects potential dam sites. This withdrawal covers some 4,709 acres of land identified as showing a moderate potential for the occurrence of gold.

Review of the two FERC withdrawals in Ferry Swale would have no environmental, social, or economic impacts; however, revocation of the withdrawals and conversion to Title V rights-of-way could have positive benefits by removing segregation orders on these lands and restoring the general land laws. These lands would then be open to a greater variety of uses, resulting in low-to-moderate, beneficial impact for those that had previously been prohibited.

Allowing partial termination of 44 acres of the Vermillion Cliffs Natural Area (that area outside the wilderness boundary) near Vermillion Cliffs Lodge for disposition under the public land laws would make it possible to exchange affected acreage for historical and recreational lands.

- Rights-of-Way Corridors and other Rights-of-Way

The proposed plan would reduce the width of the existing right-of-way (R/W) corridor in most of the Shivwits Resource Area from two to one mile. In desert tortoise habitat, the corridor would be eliminated and individual right-of-way proposals would be analyzed on a case-by-case basis. The corridor in the Vermillion Resource Area would be increased from 2,000 feet to one mile, except in Ferry Swale where it would be 1/2-mile wide. While the corridor, where established, would continue to reduce the possible random proliferation of major rights-of-way, the width reduction in the Shivwits Resource Area could constrain utility companies from planning and placing utilities. Proposed rights-of-way on the Beaver Dam Slope would require compliance with NEPA and the Endangered Species Act (ESA) and could impact the applicant with delays in approval. Similarly, in the Vermillion Resource Area, the increased corridor width would moderately enhance utility company plans and placement of major rights-of-way.

The proposed plan would also designate an additional right-of-way corridor that would provide proponents of major utility facilities an alternative route to the existing corridor. The new Rosy Canyon/Lime Kiln corridor (Map II-3) would be one mile wide except in Rosy Canyon where it would be in the canyon bottom only. A corridor would not be established in desert tortoise habitat. This would benefit the public by providing proponents of major utility facilities a logical alternative for routing facilities that are not compatible or suitable for placement in the existing corridor.

Rights-of-way would continue to be issued on a case-by-case basis.

Encouraging underground placement of smaller, distribution utilities in certain parts of the district would adversely affect proponents economically to a high degree and would not be a viable alternative for temporary lines. Total restriction of permanent distribution facilities in the Grama and Kanab canyons, Moccasin Mountains and Marble Canyon areas should not adversely affect proponents because of the expense to cross such areas and the viable alternatives. Few such proposals are expected.

The district has no reasonable alternative for the alignment of a corridor outside of desert tortoise habitat in the western portion of the Shivwits Resource Area. Due to the uncertain adverse impacts corridor designation would have on the desert tortoise, corridor routes have not been established. In this area all rights-of-way authorized in desert tortoise habitat would require routing, construction, and maintenance that would not adversely affect desert tortoise. This could result in additional construction and maintenance costs to the right-of- way holder and lead to the proliferation of individual right-of-way routes.

FROM SPECIAL STATUS SPECIES

Designation of special management areas such as ACECs to protect special values are often accompanied by management prescriptions which preclude certain land use authorization requests. Denial or modification of such requests would have adverse economic impacts on the public. Negative impacts would occur primarily in the Beaver Dam/Littlefield area through restrictions required to protect woundfin minnow, Virgin River chub, and desert tortoise habitat. Retention of all essential federally-protected desert tortoise habitat could limit the extent that the Littlefield/Beaver Dam and Mesquite communities could expand. This could be a significant impact based on their current rapid growth rate.

FROM EASEMENT ACQUISITION

Securing easements across private land to gain access to public lands would benefit the general public by making these lands open for public use. This action would also allow the BLM to enter isolated lands for administrative purposes such as livestock grazing and wildlife management.

FROM SPECIAL DESIGNATIONS

Special designations to protect or enhance resource values may be accompanied by management prescriptions which could preclude certain land use authorization requests, such as rights-of-way or disposals, if incompatible with the purpose of the designation.

FROM MINERAL RESOURCES

Federal lands that are open to entry under the mining laws are subject to patenting of claims if valuable minerals are found. Issuance of patents are not necessary for mineral production and are not discretionary if certain conditions are met.

One patent application for 130 acres is pending and others may be filed during the life of the plan. This could result in a negative impact by breaking up the existing blocked federal land pattern. Conversely, lands in private

ownership benefit tax bases and provide private economic development opportunities. In any case, less than 1 percent of the acreage in the Arizona Strip District is likely to have any patent application filed on it. Furthermore, only a small percentage of the lands applied for would likely receive patents, given the stringent requirements.

CONCLUSIONS

Development of Seegmiller Mountain as a new communication site imposes a negative impact for potential applicants who want good access. The Seegmiller site is nearer to existing electricity and more attractive to facilities requiring high power for operation.

ACEC designations for special status species could restrict certain land use authorizations within ACECs. Adverse impacts to public users could also occur through the prevention of possible community expansion near Littlefield for the protection of endangered species.

Restrictions on right-of-way construction on the Paria Plateau would adversely affect potential applicants. Applicants may have to seek longer alternative routes or expensive mitigation may be required.

Acquisition of state or private inholdings by BLM could provide benefits to all resource programs and the public. Resource values would be placed under multiple use management and secured for public benefit. Public service and efficiency would also be provided by eliminating one administering agency in the case of state acquisitions.

Designating a one mile wide right-of-way corridor across the Arizona Strip would be beneficial by preventing proliferation of rights-of-way, minimizing environmental degradation and facilitating right-of-way processing. Negative impacts would affect right-of-way proponents on areas where no above-ground linear rights-of-way would be granted. Adverse impacts could also result from the lack of designation of a right-of-way corridor through desert tortoise habitat.

Acquiring easements to isolated public lands has positive effects for the general public as well as BLM. Access would be secured for visitors and for BLM administration purposes.

The lands program would benefit from review of the FERC withdrawal in Ferry Swale provided it was no longer needed. Such a withdrawal is not an appropriate method of allowing rights-of-way on public lands. Authorization should be under Section 501 of FLPMA.

Wilderness, scenic, and recreation values of public lands would not be affected from visual, noise and secondary impacts of an airport in Ferry Swale. Local officials would be expected to investigate alternative airport siting opportunities.

Mineral patents could contribute to, in a minor way, a fragmented land pattern.

IMPACTS TO MINERAL RESOURCE DEVELOPMENT

FROM LAND RESOURCES

- Ownership Adjustments

Ownership adjustments on 25,188 acres of public lands could negatively affect prospective mineral development. The majority of the lands that would be disposed of are located in areas identified as having high potential for locatable minerals and moderate potential for oil and gas. Once these lands leave public ownership and become developed the likelihood of mineral exploration on the tracts would be minimal. This would be the case even if the minerals were retained in public ownership. Without exploration, chances are slim that any mineral resources which may underlie the tract would be developed throughout the life of the plan.

The acquisition of 161,800 acres of state land and 21,600 acres of private land could have a positive effect on the development of mineral resources which may underlie these lands. A significant portion of these lands are located in areas which show a high potential for locatable minerals, such as uranium, and a moderate potential for leasable minerals such as oil and gas. The blocking of land ownership patterns would have positive impacts on mineral exploration and development because landowners and operators would be subject to only one set of regulations.

- Withdrawal Revocation

Revocation of the Turbinella-Gambel Oak protective withdrawal would have a positive impact on the development of any locatable and leasable minerals which may underlie the tract. This withdrawal covers about 154

acres of land identified as having a high potential for locatable minerals and moderate potential for oil and gas. Currently the area is withdrawn from mineral entry and leasing.

Revocation of the Boulder Canyon withdrawal would have a positive effect on the development of any locatable minerals which may underlie the tract. Currently the area is withdrawn from mineral entry under a Bureau of Reclamation first form withdrawal that protects potential dam sites. This withdrawal covers 4,709 acres of land having a moderate potential for gold.

FROM SPECIAL DESIGNATIONS

The designation of ACECs would have a negative impact on mineral resource development. These areas are all located in areas determined to have high or moderate potential for locatable minerals. Specifically, Marble Canyon, Witch Pool, Nampaweap, Fort Pierce, Little Black Mountain, Johnson Spring, Moonshine Ridge, and Lost Spring Mountain all lie in areas known to be highly favorable for uranium mineral resources contained in breccia pipes and sandstone bodies. The Beaver Dam and Virgin River ACECs lie in areas having moderate potential for gold. The designation of the ACEC would require the submission of a plan of operation under the 43 CFR 3809 regulations for any activities exceeding casual use. This plan would require the preparation of an environmental assessment prior to approval and consequently increase cost to the developer due to time delays and environmental studies.

In the cases of Witch Pool, Nampaweap, and Little Black Mountain ACECs, relatively small areas have been included in the ACEC based on the small area of known cultural resource occurrence. Operations that would not adversely affect cultural resources and would not cause unnecessary or undue degradation would be allowed.

Mineral material disposals would be prohibited within ACECs. Marble Canyon, Witch Pool, Nampaweap, Fort Pierce, and Little Black Mountain are located in areas having low potential for significant quantities of good quality mineral materials. The designation would, therefore, have little adverse impact to the development of aggregate resources potentially or currently being used.

In the case of Moonshine Ridge ACEC, significant gravel resources just outside the ACEC boundary are being developed from exposures of the Chinle Formation. Gravel is a relatively scarce resource in this area and it is currently being hauled 15-20 miles for use in Colorado City. Johnson Spring, Moonshine Ridge, and Lost Spring Mountain are all located in areas showing high potential for gravel. Their designation would have a significant adverse impact on the development of aggregate resources within these areas.

In the Virgin River ACEC, significant gravel resources have been developed on exposures of alluvial terraces formed along the Virgin River. Accessible gravel on public land is a relatively scarce resource in this area. This ACEC is located in an area showing high potential for gravel. Prohibiting disposal would significantly affect the development of aggregate resources used in Littlefield and Beaver Dam areas. One area has already been excluded from the ACEC. This area, an old aggregate source used in construction of I-15, should provide enough quantities of gravel for a number of years.

FROM SPECIAL STATUS ANIMALS AND OTHER WILDLIFE RESOURCES

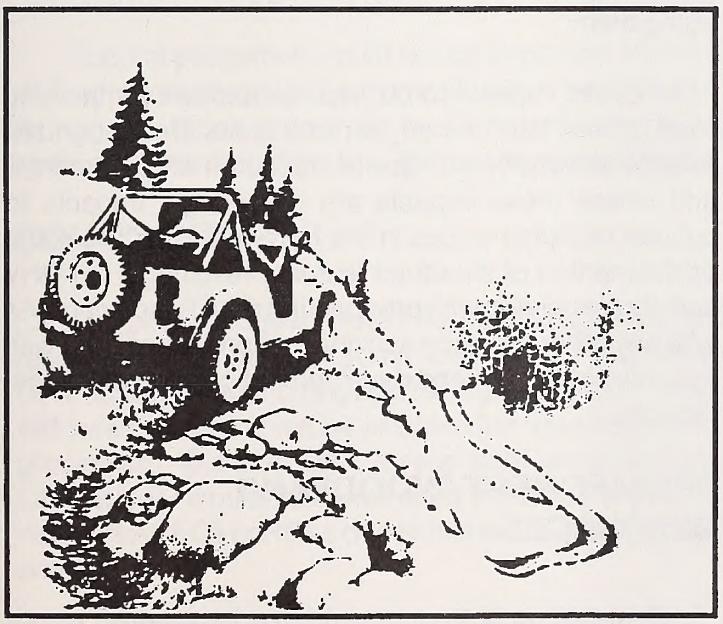
Through the planning process, certain wildlife species would be protected from the seasonal restrictions that would apply to leasable mineral exploration. The protected species include bighorn sheep and the endangered peregrine falcon. In order to protect bighorn sheep during the breeding season, oil and gas exploration activities would be prohibited between December 1 and May 31. This limitation would apply only to the lower Grand Wash Cliffs because this is the only area of bighorn sheep habitat not substantially within designated wilderness. The imposition of this stipulation could cause delays, adversely affecting oil and gas lease operations. The area, however, is rated as having a low potential for oil and gas resources. Any leases issued in this area would be limited to exploration for the 6 month period between June 1 and December 30.

Peregrine falcon habitat has been identified in certain portions of the district. This habitat is important to the peregrine falcon during the nesting and breeding season. In these areas, oil and gas exploration activities would be prohibited from March 1 through September 30. This limitation would apply to the following areas: Vermillion Cliffs; Kanab Creek; Marble, Grama, Hack, Andrus, Parashant, and Dansil canyons; the Virgin River Gorge, and the upper Grand Wash Cliffs. The imposition of this stipulation could cause delays, adversely affecting oil and gas lease operations. The majority of these areas are, however, rated as having a low potential for oil and gas. Any leases issued for exploration would be limited to a 7 month period between August 1 and March 1.

FROM OHV DESIGNATIONS

Designating acreage as closed to OHV use would have a negative impact on exploration and development of all mineral resources in the designated areas. The impact would result from delays in exploration and development programs as a result of complying with the plan approval process required to bring equipment into these areas.

All of the OHV closed areas are located in areas having high or moderate potential for locatable mineral resources. Two of these areas, Kanab Creek and Grama Canyon, are located not only in areas of high mineral resource potential, but also in areas where the exploration and development of uranium has been intense. In the case of the OHV closure along Marble Canyon, even though no uranium mining has been conducted, the area has a high potential for the occurrence of uranium in breccia pipes. The OHV closed area on the Beaver Dam Slope is located in an area having a moderate potential for gold. The closure of these areas would require filing a plan of operation for any activity that would use motorized vehicles as the form of access. This plan would require the preparation of an environmental assessment prior to approval. This could result in a 30 to 90 day delay for each operation. Operations which are determined through the environmental review process not to cause undue or unnecessary degradation would be allowed to proceed.



The limited OHV designations are not expected to significantly affect the development of oil and gas since mineral exploration is an exception to the limited designations.

FROM VISUAL RESOURCES

No-surface occupancy would be allowed on any lease issued within the Virgin River Gorge Scenic Withdrawal, Kanab Creek, or Grama Canyon. This restriction would protect visual resources in these canyons. The imposition of this stipulation could negatively affect oil and gas lease operations and operations conducted under 43 CFR 3150. Given the steep terrain in these canyons and the limited access available in the canyon bottoms, this stipulation is not expected to have a significant effect on oil and gas exploration operations. Furthermore, the majority of these areas have been assigned a low potential for the occurrence of oil and gas.

Restrictions prohibiting surface occupancy on slopes of greater than 30 percent would be applied to Moccasin Mountain, the Hurricane Cliffs escarpment, Diamond Butte, the Upper and Lower Grand Wash Cliffs, and Andrus, Dansil and Parashant canyons. These stipulations are designed to limit surface-disturbing activities which would cause a long-term visual impact in these areas. The imposition of this stipulation could negatively affect oil and gas lease operations and operations conducted under 43 CFR 3150. Oil and gas could still be leased. Drilling and development, however, would have to be conducted via directional drilling techniques. These techniques are costly in both exploration and development dollars. Leases issued with these types of stipulations are less likely to be explored due to the higher cost. Portions of these areas are located in areas rated as having a moderate potential for oil and gas.

CONCLUSIONS

Implementation of the proposed plan would restrict or preclude mineral resource exploration and development in certain areas to protect or accommodate other non-mineral resources and uses. Land disposals would discourage mineral resource exploration in specific areas while land acquisitions would encourage exploration in others. Revocation of the Turbinella-Gambel Oak and the Boulder Canyon withdrawal would positively affect mineral resources by allowing certain development.

ACEC designations would encumber locatable mineral resource exploration and development through delays associated with plan approvals. The majority of ACEC proposals lie in areas having a high potential for mineralized breccia pipes. The remainder of ACECs lie in areas having moderate potential for gold. Mineral material disposals would be prohibited in the ACECs. In the case of Virgin River, Moonshine Ridge, Johnson Spring

and Lost Spring Mountain ACECs, this could adversely affect the availability of aggregate needed by local communities.

OHV closures would also negatively affect exploration for locatable mineral resources. In these areas, a plan would be required for any proposals to use motorized vehicles as a form of access. Impacts would result from delays required by the plan approval process. The proposed closed areas all have high or moderate potential for locatable mineral resources.

Restrictions designed to protect visual resources would negatively affect leasable mineral operations by prohibiting surface occupancy. This could require off-lease exploration and development in these areas. Leases issued with these types of stipulations are less likely to be developed because of associated higher costs.

IMPACTS TO CULTURAL RESOURCES

FROM LAND RESOURCES

Through the land exchange program, 161,800 acres of state land and their yet unknown and uninventoried cultural sites would come under federal protection.

Proposed land actions would include acquisition of 240 acres of private and 2,960 acres of state land on Moonshine Ridge, as well as 160 acres of private and 960 acres of state land under public ownership and management on Lost Spring Mountain. Private and state land on the Paria Plateau would also come under Bureau stewardship.

Impacts to cultural resources in priority areas would result from inclusion of more sites under federal protection with special designations. Bringing these state and privately owned sites under special designation management would be beneficial over the life of the RMP. Sites would be identified and evaluated through proposed inventory actions and protected by law enforcement and education. The NEPA process would mitigate all federal actions.

FROM MINERAL RESOURCES

With the following exception, cultural resources would be afforded the same level of protection as under current management. In order to protect fragile cultural resources from impacts of activity associated with exploration, Johnson Spring, Lost Spring Mountain, Moonshine Ridge, Witch Pool, Nampaweap, and Little Black Mountain would become established ACECs. These ACECs contain unique cultural resource values of National Register quality or areas of high site density. By virtue of the ACEC designations, mining plans of operation would need to be submitted and approved before all actions exceeding casual use within the ACECs. The benefit to cultural resource management would be in the form of an extended review period for what would otherwise be a notice level operation. The review period would be extended from 15 days to 30 days unless substantial public interest is expressed, in which case up to 90 days may be taken for the review. Within these ACECs, Class III cultural resource inventories would be required for all areas potentially affected by geophysical operations authorized under 43 CFR 3150 and 43 CFR 3160. This would be a long-term, beneficial impact to cultural resources.

Through the compliance process for Section 106 of the National Historic Preservation Act, all cultural properties listed on or eligible for the National Register, identified through review of a plan of operation, would be protected or impacts to them mitigated. While review of a mining notice is not subject to the procedures of Section 106 compliance, 43 CFR 3809 specifically provides for the protection of cultural properties by prohibiting mining operators from knowingly disturbing or damaging them.

Indirect impacts to cultural resources by improving road access into formerly remote areas are recognized as potentially adverse. Current research will determine if and where these impacts are occurring. Impacts to cultural resource values in the form of artifact breakage or destruction of structural features resulting from OHV activity associated with prospecting could also occur. As with any other resource activity, persons associated with mineral exploration and development could also vandalize sites.

FROM FOREST/WOODLAND RESOURCES

Designating both green and dead-and-down woodcutting areas in the Shivwits and Vermillion resource areas would result in a positive impact to cultural resources because all areas designated would be inventoried and all National Register-listed or eligible properties would be recorded and omitted from the cutting areas.

FROM SPECIAL DESIGNATIONS

Six areas including 18,710 acres (Lost Spring Mountain, Moonshine Ridge, Johnson Spring, Little Black Mountain, Witch Pool, and Nampaweap are proposed for designation as ACECs because of their important cultural resource values. Four other areas; Beaver Dam, Virgin River Corridor, Fort Pierce, and Marble Canyon, totaling 40,500 acres would also be designated as ACECs for other resource values. This would afford additional protection to unknown cultural resource values. Two areas encompassing 159,000 acres in the Parashant and Mt. Trumbull are proposed to be designated as resource conservation areas (RCAs) and would provide more focused management of multiple-use resources including cultural resources. The Paria Plateau would also be designated as an RCA and covers 227,000 acres.

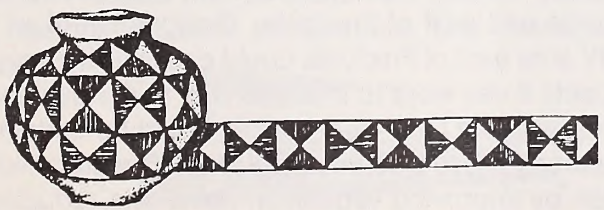
In these areas, management prescriptions (Table II-2) would be implemented to protect and preserve cultural resources and would be a long-term, beneficial impact. The areas of cultural priority would receive increased ranger patrols as part of the special designation management. Patrols would reduce vandalism, OHV activities, and loss of context of cultural resources. Losses in areas of cultural priority would be low, including natural losses to erosion. ACEC and RCA designation would occur on 402,210 acres and benefit cultural values.

FROM OHV DESIGNATIONS

Cultural properties would not be accessed and vandalized as easily as the current situation and physical damage to those properties by OHV traffic would be reduced. This would be a long-term, beneficial impact.

CONCLUSIONS

The proposed plan would be beneficial for cultural resources regardless of some losses from vandalism, OHV activity, woodcutting and natural processes. Natural losses of cultural values would occur from weathering processes. Cultural value losses from vandalism and OHV activity would be lower once the areas are designated as ACECs or RCAs due to increased management emphasis.



IMPACTS TO SOIL, WATER AND AIR RESOURCES

FROM LAND RESOURCES

The proposed right-of-way corridor would have positive impacts in that disturbances would be concentrated within a narrow area. Mitigation measures approved through site-specific environmental assessments (EAs) would reduce or alleviate any potential impacts to watershed values.

FROM MINERAL RESOURCES

Empirical data will continue to be collected from mining industries that could potentially affect groundwater. To date, this data has demonstrated that groundwater inflow rates into underground mines is generally of short duration and of limited aerial extent. The depths of mining for uranium generally are well above the Redwall and Muav Formations, which are the major aquifers of concern. Further, the sedimentary host rock surrounding these deposits is mostly impermeable, precluding the potential for long-term impacts to this regional culinary water aquifer. Absorption of heavy metals and radioactive constituents on the surface of clays as well as chemical reactions with limestone stratas tend to minimize or eliminate impacts to water quality.

Exploration activities cause only minor adverse impacts to air quality, mostly by vehicle travel which results in fugitive dust. Fugitive dust is not considered a pollutant subject to federal or state regulations. There is an adverse impact from exploration drilling due to the noise produced by the drilling operations, but this is generally short-term.

Extensive modeling of potential air and radiological impacts are conducted for every uranium mine prior to approval. Actual field measurements are obtained to check the models. To date, none of the modeling studies have demonstrated that any of the statutory thresholds for air quality have been surpassed. Therefore, no significant impacts have occurred.

Impacts to sensitive receptors are of primary concern due to the close proximity of Class I airshed at Grand Canyon National Park to some of the high potential mineral areas and active mining operations. Based on known impact studies, a full-scale mining operation would have to be closer than 1,000 meters from the Grand Canyon National Park boundary to surpass the statutory

levels of significance which are designed to protect their Class I airshed. The 1,000-meter threshold assumes no mitigation for dust emissions. This distance could be less depending on the magnitude of dust emissions and type of mitigation, if any.

Under current management, the entire district is open to mineral leasing for oil and gas (excluding wilderness areas) with no special leasing stipulations developed to protect sensitive watersheds. Approximately 43 wells have been drilled, creating 345 acres of watershed disturbance. Most of the recent exploration activities have been east of Fredonia. Standard oil and gas stipulations have been incorporated into leases which require reclamation and other procedures to prevent permanent adverse environmental impacts. No identified sensitive watershed areas have been affected by leasable mineral activities.

Under the proposed plan, ACEC designations would require submission and approval of a plan of operation for any activities exceeding casual use. This would result in positive impacts to watershed resources.

Appendix 27 and Map III-1 describe projected oil and gas activities throughout the life of the plan and depict oil and gas potential. Based on assumptions and projections, an additional 65 acres could be disturbed from exploration and another 350 acres from development. Standard leasing stipulations require basic reclamation procedures. Especially fragile watershed with highly erosive saline soils could, however, be affected (assuming some exploration or development would occur on them). These impacts would be addressed in the application for permit to drill (APD) process. Seasonal lease stipulations for special status species would benefit watershed resources by restricting uses during the springtime when many plants are growing.

FROM WATERSHED

Implementation of watershed activity plans for degraded watershed areas by priority would have a high beneficial impact on watershed conditions by improving ground cover and reducing the rate of overland water flows.

FROM RIPARIAN

Under the proposed plan, riparian area management would continue to receive high priority for management attention. Implementation of grazing systems to improve riparian areas would change use patterns and allow deferment and rest. This would have a long-term, beneficial impact to soil and water resources in these small but important areas. As in the past, grazing would be excluded from important riparian areas by fencing when warranted and feasible and would be a high beneficial impact. More intensive management of the watersheds above riparian areas would also be considered.

FROM FOREST/WOODLAND RESOURCES

Under the proposed plan, the areas designated for fuelwood cutting would be identified and inventoried. This should confine impacts to specific areas, minimizing adverse impacts to soil, water, and air resources, mainly as a result of OHV use. OHV use crushes vegetation and disturbs the surface, making it vulnerable to accelerated water erosion by channeling runoff in the vehicle tracks. Wind erosion is also accelerated, to a minor extent, due to the freshly disturbed soil. Increased surface disturbance is anticipated as nearby population centers grow. In certain areas pinyon-juniper manipulation could be designed specifically to reduce erosion, which would be considered a positive impact. Positive impacts would also occur to wildlife and grazing.

Ponderosa pine throughout the district, except in wilderness areas, would only be harvested to enhance other resource values. This would be beneficial to watershed resources in that there would be less surface disturbance. However, this management strategy tends to increase the risk of catastrophic fire. If this were to happen, the impact to watershed resources would be significantly adverse.

FROM OHV DESIGNATIONS

Limiting OHV use to existing and/or designated roads and trails or closing certain areas would reduce future erosion. These actions would protect both vegetation and cryptogamic cover and thus protect the soil from accelerated erosion. This is most significant on fragile and/or saline soils (Maps III-10 and III-11), especially those close to towns. OHV closures would enhance water quality by reducing salt loading and sedimentation in highly erosive areas. Soil rutting and the resulting gully erosion over all soil types would be reduced. This would also reduce wind erosion south of St. George and east of Fredonia. Designation of an open OHV area east of Fredonia could cause further negative impacts if use were to increase due to the designation. Along with the OHV designation would be certain road closures. These closures would benefit watershed condition by improving vegetation cover and reducing soil loss from both wind and water.

FROM TRANSPORTATION/ACCESS

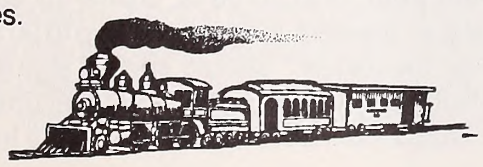
Currently, over 5,402 miles of road cross the district. Most of these roads were created many years ago as a result of mining and grazing activities. Many traverse drainages, cross salty bottomlands and are not located in the most environmentally preferred locations. As a result, many roads increase soil loss, sedimentation and salt loading, and adversely affect air quality. Under current management, little attention is focused on this situation, unless a project is proposed in an area where this exists. In such cases, road modifications are helping resolve environmental problems. To date, mining companies on the Arizona Strip are predominantly responsible for helping the Bureau modify roads. However, the percentage of roads that have been improved is minor compared to the size of the effort required to reduce the adverse impacts mentioned above.

FROM FIRE

Fire has both a minor beneficial and adverse impact on soil productivity and water quality as a result of ash. Generally fire decreases short-term and increases long-term effective vegetative ground cover and is therefore beneficial to watershed condition. However, both suppression activities and prescribed burns can have adverse impacts on soil loss due to the use of hand tools or heavy equipment in constructing firelines. The results of these activities may not be rehabilitated, causing short-term soil loss, predominantly from wind. These impacts are usually small and localized and do not have much impact on overall watershed conditions. They may have minor adverse impacts by increasing sediment or salt loading on drainage system depending on their proximity to the drainage system. Smoke adversely affects air quality for a short duration.

CONCLUSIONS

Under the proposed plan, beneficial impacts to watershed resources would be derived from placing a higher priority on watershed, including developing overall management plans for all areas of moderate to severe erosion condition and implementing management actions to improve riparian areas. There would also be beneficial impacts due to areas with special management designation, OHV designations, and subsequent road closures.



IMPACTS TO SPECIAL STATUS SPECIES

FROM LAND RESOURCES

- Ownership Adjustments

Under the proposed plan, 210 acres of Category III tortoise habitat (areas of low value in sustaining viable populations of tortoise) are identified for potential transfer by lease or sale under the Recreation and Public Purposes Act. These lands, plus an additional 2,927 acres of tortoise habitat are identified for disposal by exchange, provided better quantity or quality tortoise habitat can be acquired in the same area and the net effect would be beneficial to tortoise recovery. If the 210 acres of tortoise habitat are sold, rather than exchanged, there may be a negative impact to historic tortoise habitat. However, much of the 210 acres have been essentially destroyed as tortoise habitat, so impacts would be minimal. Recent inventories indicate no tortoise are present on the 210 acres. Sale of this land would be subject to a detailed environmental analysis and consultation with Fish and Wildlife Service (FWS) according to the Endangered Species Act. This consultation would occur after an R&PP application for the 210 acres is received. Appropriate mitigation would then be identified and attained. The possible transfer of up to 1,960 acres by exchange could benefit the tortoise population by increasing the quantity or quality of habitat under management in the area.

Land acquisitions through exchange with the State of Arizona would have long-term, positive benefits to special status species such as the Siler pincushion cactus. Land acquisition of important special status species habitats would promote the recovery of those listed and candidate species.

- Rights-of-Way Corridor

Continuation of the existing Navajo-McCullough right-of-way corridor in desert tortoise habitat would not be permitted. All future right-of-way authorizations would be routed, constructed, and maintained in a manner that would avoid or minimize adverse impacts to the tortoise population, to the extent possible. Processing future right-of-way requests in this area, when they are not confined to a corridor, would provide the flexibility to identify routes that minimize impacts to desert tortoise recovery.

FROM WILDLIFE RESOURCES

Wildlife management activities under the proposed plan would intensify monitoring of wildlife objectives and help to improve management efforts for all wildlife species, including special status animals.

Monitoring information would be summarized and included in future HMP revisions, improving the effectiveness of wildlife management and those planned actions beneficial to special status animals. The proliferation of predators as a result of management activities would be evaluated for their effects on desert tortoise.

FROM RIPARIAN

Special status animals would be positively affected by actions proposed for the improvement of riparian habitats. The woundfin minnow, the Virgin River chub, and the Virgin River spinedace would benefit from improved riparian habitats along the Virgin River through regulation of other land use activities.

The peregrine falcon prey base would likely improve as riparian conditions improve the quality of habitat for a number of bird species.

FROM SPECIAL DESIGNATIONS

Designating 20,800 acres as the Beaver Dam ACEC and 8,100 acres as the Virgin River ACEC would have highly beneficial impacts to those special status animal species within those areas, when managed in accordance with the prescriptions identified in Table II-2. These designations include management prescriptions which would regulate activities that would otherwise negatively affect the desert tortoise. The Virgin River designation would protect important riparian habitat and water quality necessary to the special status fish species.

Management prescriptions for the Virgin River ACEC would include acquiring high value riparian private/state properties along the river, limiting OHVs to designated roads, closing bottomlands to material sales, and requiring plans of operation for mineral exploration and development.

The management prescription for the desert tortoise ACEC would facilitate the overall goal of the Rangewide Plan for Desert Tortoise Management "...to manage habitat so as to ensure that viable desert tortoise populations exist on public lands." It would also be in compliance with goals for Category I habitat areas; that is maintain stable, viable populations; protect existing tortoise habitat values; and increase populations where possible.

The ACEC designations of Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring include 4,200 acres of Siler pincushion cactus habitat. Management prescriptions (Table II-2) include increased management and conservation measures such as OHVs limited to designated roads, mineral exploration and development activities requiring an approved plan of operations, and increased law enforcement patrols to deter collection. Long-term, beneficial impacts from these actions would occur.

The Brady pincushion cactus would have 10,700 acres of habitat designated as an ACEC (Marble Canyon) with the same management prescriptions and beneficial impacts assigned the Siler pincushion cactus. Fickeisen pincushion cactus occurs in part of the Marble Canyon ACEC and would also benefit from the management prescriptions.

FROM MINERAL RESOURCES

For locatable mineral exploration and development covered under a notice or plan of operation (43 CFR 3809 regulations), no long-term negative impacts to federally-listed special status species would occur. Negative impacts could occur to special status species in the case of casual use where a notice or plan of operation is not required. Monitoring studies conducted since 1983 have not documented any cases of impacts to special status plants. Exploration and assessment has negatively affected desert tortoise habitat by creating new roads and trails.

In order to further protect special status species from impacts resulting from mineral exploration, Beaver Dam, Virgin River, Fort Pierce, Johnson Spring, Lost Spring Mountain, Moonshine Ridge, and Marble Canyon would be established as ACECs. By virtue of the ACEC designations, plans of operation would need to be submitted and approved for all operations exceeding casual use within the ACECs. The benefit of this alternative to special status species management would be in the form of an extended review period for what would otherwise be a notice level operation. The review period would be extended from 15 to 30 days, unless substantial public interest is expressed, in which case up to 90 days may be taken for the review. Should special status species be found within the area of proposed operations, they would be protected from adverse impacts in the long-term.

In addition to the ACEC designations, the Beaver Dam ACEC and an area bordering Marble Canyon would be closed to OHV activity. Thus, any proposals to use motorized vehicles as a form of access into areas closed to such use would require plan of operation and approval. Prior to plan approval, an inventory for endangered species would be completed. Any species occupying the area of proposed operations would require protection from adverse impacts.

The ACECs would be closed to mineral material disposals which would have a long-term, beneficial impact to special status species.

Policies concerning the protection of special status species also apply to leasable mineral resource operations. Stipulations to protect special status species may be applied to notices of intent (NOIs) to conduct geophysical operations, applications for permit to drill (APDs), and sundry notices (SNs) which amend APDs.

Lease stipulations would be applied to protect peregrine falcons during breeding and nesting season. This restriction would allow exploration activity only during the period between August 1 and March 1. The restriction would apply to areas open to lease within 1 mile of superior, acceptable, or historic peregrine habitat in the following areas: Grand Wash Cliffs; Dansil, Andrus, Grama, Marble, and Hack Canyons; Kanab Creek; the Virgin River Gorge, and the Vermillion Cliffs. This action would provide a long-term, beneficial impact to peregrine falcon from oil and gas exploration activities.

FROM OHV DESIGNATIONS

Designating 1,541,200 acres limited to existing roads and trails, 646,800 acres limited to designated roads and trails, and 358,600 acres closed would have beneficial short- and long-term impacts to habitats of special status species. The 800 acres designated as open could negatively impact Siler pincushion cactus which would require consultation with FWS. Compliances with the OHV designations would be monitored through frequent surveillance by the district ranger.

CONCLUSIONS

The proposed plan would provide long-term, beneficial impacts because it would provide additional protection of special status species through ACEC designation, associated increased management attention and OHV restrictions. Mineral activities in ACECs would require submission and approval of a plan of operations before any land could be disturbed, thus, ensuring the protection of the species and resulting in long-term, beneficial impacts.

The proposed plan also provides for the protection and management of habitats important to the existence of special status animals. Special designations and management of the Beaver Dam and Virgin River areas provide benefits and needed emphasis for protection and management of the desert tortoise and special status fishes. All authorized land use activities and resource disciplines would be directed toward habitat improvement important to special status animals. Seasonal restrictions applied to leasable mineral resource exploration operations would be provided for the benefit of peregrine falcon.

Land exchanges which bring state and private lands into federal stewardship for desert tortoise or riparian areas along the Virgin River for special status fish, would provide a long-term, beneficial impact.

IMPACTS TO RIPARIAN AREAS

FROM LAND RESOURCES

Some exchanges would involve acquisition of springs and their riparian areas. This would result in a long-term, positive impact as the land would be protected under federal riparian management.

FROM SPECIAL DESIGNATIONS

Under the proposed plan, a significant riparian area along the Virgin River (8,100 acres) would be designated as an ACEC. Management prescriptions for the Virgin River ACEC include acquiring high-value riparian private/state properties along the Virgin River, closing bottomlands to material sales (gravel), limiting OHVs to designated roads, and requiring submission and approval of a mining plan for operations exceeding casual use. Impacts from special designations on riparian plant communities would be positive over the short- and long-term. Riparian vegetation previously trampled or driven over would grow and increase, building up stream banks and providing shade to aquatic organisms, both vital processes necessary for improved riparian habitat.

FROM MINERAL RESOURCES

In most identified riparian areas, locatable mineral resource exploration and development operations proposed under a plan of operation would be regulated to prevent long-term, adverse impacts. Operations conducted under a notice would require protection from unnecessary or undue degradation to the environment, including riparian areas.

Of the priority riparian areas identified in Table IV-1, only areas in a designated wilderness are fully protected from impacts from mineral exploration and development. In addition, the Virgin River is protected beginning at the Utah/Arizona boundary and extending to the mouth of the gorge by wilderness designation and the Virgin River scenic withdrawal.

The remainder of riparian habitats not in wilderness areas are subject to locatable mineral resource exploration and development. Due to the limited extent and sensitive nature of the riparian area, any disturbance would be detrimental to the short- and long-term condition of the area. However, except for the Virgin River, none of these areas seem favorable for locatable mineral resources which could be extracted or developed. In the case of the Virgin River, gold mineralization would not lend itself to conventional gravity separation methods since the gold is too fine. Industry interest has centered around chemical extraction techniques that would not require free-flowing water in riparian areas. Any development proposed, therefore, is not expected to affect these riparian areas.

Riparian areas are not expected to be affected by oil and gas exploration and development due to discretionary leasing, stipulations for mitigation, and the probability of activities targeting small riparian areas.

FROM OHVs

OHV activity along the Virgin River riparian area is heavy in the Virgin River-Beaver Dam Creek confluence. Riparian vegetation has been damaged or killed on an estimated 5-10 acres. The riparian area here and between Mesquite and Littlefield has been negatively affected by OHVs.

FROM RIPARIAN

Under the proposed plan, the riparian areas would be managed under existing HMPs, AMPs, and BLM riparian policy. Springs and their riparian areas would continue to improve as the riparian plant communities are fenced and protected from livestock, OHV, and recreation use. However, fences may be breached allowing occasional negative impacts to riparian areas from these uses.

The Paria River riparian area would continue to improve under wilderness protection and rest-rotation grazing. The Kanab Creek riparian area would improve slightly.

Riparian areas along the Virgin River from the gorge to Mesquite would deteriorate slightly from OHV activity and livestock use.

Fenced springs and riparian areas managed under grazing management systems allowing rest or deferment would maintain or improve. Riparian areas that continue under yearlong grazing use would be negatively impacted.

CONCLUSIONS

Riparian areas along the Virgin River would receive additional protection and management. Acquisition of high-value riparian areas along the Virgin River would be pursued. Impacts from special designations would be positive, providing protection from disturbance. Impacts from locatable mineral exploration and development activities would be avoided if possible. There would be a short- and long-term, beneficial impact to the riparian area resources.

IMPACTS TO FOREST/ WOODLAND RESOURCES

FROM LAND RESOURCES

Through the land acquisition program, 560 acres of state lands would bring more ponderosa pine under federal management. This would eliminate political boundaries and replace them with natural boundaries. Disease or insect control should be easier and less costly.

FROM MINERAL RESOURCES

Locatable mineral exploration and development within a particular project area are small and would have a very low adverse impact on harvest of woodland products. Surface disturbance resulting from exploration and de-

TABLE IV-1
SUMMARY OF IMPACTS TO PRIORITY RIPARIAN AREAS FROM THE PROPOSED PLAN

RIPARIAN AREA	LEGAL DESCRIPTION	APPROXIMATE SIZE/LENGTH	PROPOSED PLAN	IMPACT OF IMPLEMENTATION
Virgin River	T41N R12/13/14W T40N R15/16W	29 miles	Slightly Improve	Slight Positive
Beaver Dam Wash	T40N R15W S4 E1/2NW1/4 NE1/4SW1/4	50 acres	Improve	Positive
Paria River	T41N R6/7E	24.7 miles	Improve	Positive
Kanab Creek	T38/39N R3W	12.5 miles	Maintain to Slightly Improve	No Change to Slight Positive
Bull Rush Wash	T39N R4W S4,6,7,8,9,16,17,18 T40N R4W S31	9 miles	Improve	Positive
Sullivan Spring	T39N R14W S10 NW1/4	2.5 acres	Maintain	No Change
Gates-Mullen Spring	T39N R14W S3 NW1/4	5.0 acres	Maintain	No Change
Buckhorn Spring	T34N R16W S26 SE1/4NE1/4	2.0 acres	Improve	Positive
Grapevine Spring	T34N R16W S26 NE1/4NE1/4	2.0 acres	Improve	Positive
Whiskey Spring	T34N R16W S26 SE1/4SW1/4	3.0 acres	Maintain	No Change
Little Arizona Spring	T34N R16W S24 NW1/4NW1/4	2.0 acres	Improve	Positive
Cottonwood Spring	T42N R6E S34 SE1/4SE1/4	4.0 acres	Maintain	No Change
Wrather Spring	T41N R6E S8 SW1/4SW1/4	2.0 acres	Maintain	No Change
Badger Creek Spring	T40N R6E S12 NE1/4NW1/4	2.0 acres	Maintain	No Change
Red Rock Spring	T36N R16W S5 SE1/4NE1/4	0.5 acres	Maintain	No Change
Middle Spring	T36N R16W S7 NE1/4SE1/4	2.0 acres	Maintain	No Change
Cane Spring	T38N R14W S34 NE1/4	5.0 acres	Maintain	No Change
Pocum Wash	T38N R14W S14/24	3.0 acres	Improve	Positive
Elbow Canyon Complex (Willow Springs et al.)	T39N R15W S22 S1/2	2.0 acres	Improve	Positive
Kelly Dam	T32N R12W S23 NE1/4	50 acres	Maintain	No Change

velopment of mineral resources contained within breccia pipes typically disturb up to 20 acres at each mine site. While the ponderosa pine areas shown on Map II-10 lie within an area identified as having a high potential for locatable minerals contained within breccia pipes, no development in these areas is expected over the life of the plan because of exploration difficulties associated with volcanic cover. Although some exploration is expected, impacts to ponderosa forests would be localized and insignificant.

Oil and gas exploration and development cause relatively small disturbances. Exploration operations typically disturb eight acres at each site. Approximately 65 acres could be disturbed districtwide from this activity over the life of the plan. Should production be established, approximately 350 acres of the 3,500 acres would be disturbed. Ponderosa pine (Map II-10) lie within an area identified as having little potential for oil and gas and no development or production activities are expected. Exploration could take place in this area but impacts would be confined to a small area and disturbances would be reclaimed following cessation of operations.

FROM FOREST/WOODLAND RESOURCES

Under the proposed plan, 10,700 acres of Uinkaret Mountain, 3,400 acres of the Parashant, 1,100 acres of Black Rock Mountain ponderosa pine forest would all be managed to enhance other resources. Possible silvicultural practices and other aspects of the planned forest management program would have both beneficial and adverse impacts on the ponderosa pine component of the forest ecosystem. Adverse impacts resulting from practices such as thinning kill individual trees. Carefully managed selective thinning would have a long-term, beneficial impact by reducing overcrowding in areas with thick younger-aged stands, and allowing remaining trees to be more vigorous and by removing trees which harbor insects or diseases that could harm or kill other ponderosa pine. An active fire suppression program protects ponderosa pine stands from being destroyed by fires caused by visitors or lightning. Prescribed burning and management of naturally occurring fires would have a long-term benefit by reducing the existing fuel buildup (heavy needle duff, dead wood and dense understory vegetation). In addition to reducing the likelihood of a catastrophic fire which could destroy large acreages of ponderosa pine, managed burning would also free up water, minerals, and nutrients for use by the pine trees. A possible adverse impact of prescribed burning is the damage or destruction of trees.

Under the proposed plan, 739,300 acres of the 800,000 acres of pinyon-juniper woodland would have specific management plans designed for small cut areas. As demand for fuelwood is not expected to increase on the Arizona Strip, the impact to woodlands from woodcutting is not expected to change. Management plans would allow cutting to be better managed and concentrated by providing small (5-10 acres), clear-cut areas. Positive impacts include creating openings in the pinyon-juniper woodlands where herbaceous vegetation could increase and young trees would be allowed to grow faster. Slash left from woodcutters would be cleaned up and desired plants such as grass, shrubs, and forbs could be planted.

FROM SPECIAL DESIGNATIONS

The Mt. Trumbull/Mt. Logan and Parashant areas would be managed as RCAs. Ponderosa pine in these areas would be managed for the benefit of other resource values. This would restrict the productive potential of these forests but would maintain them in a healthy condition.

Dead-and-down fuelwood cutting in the Vermillion Resource Area would be restricted to specific areas under the proposed plan, causing a negative impact.

Closing Johnson Spring, Lost Spring Mountain, and Moonshine Ridge ACECs to all woodland harvest and the Canyons and Plateaus of the Paria RCA to fuelwood and post gathering would cause a moderate negative impact to those who have used these areas in the past for woodland products.

CONCLUSIONS

Through the proposed plan, the forest would become healthier and old-growth ponderosa pine would remain uncut. Thinning operations would provide more nutrients and water to the remaining trees allowing them to grow larger. However, certain younger trees would remain suppressed by the older pines causing a negative impact. The population would remain older making it more vulnerable to disease and insects. An older forest would satisfy many other resources dependent on old-growth and medium-aged pines, such as raptors, turkeys, deer, and Kaibab squirrels.

Intense management of cutting in the woodlands would have a positive impact on the cut areas. The small clear-cuts would be like natural openings, which after cleanup of slash, would improve the growth of the young trees and herbaceous vegetation.

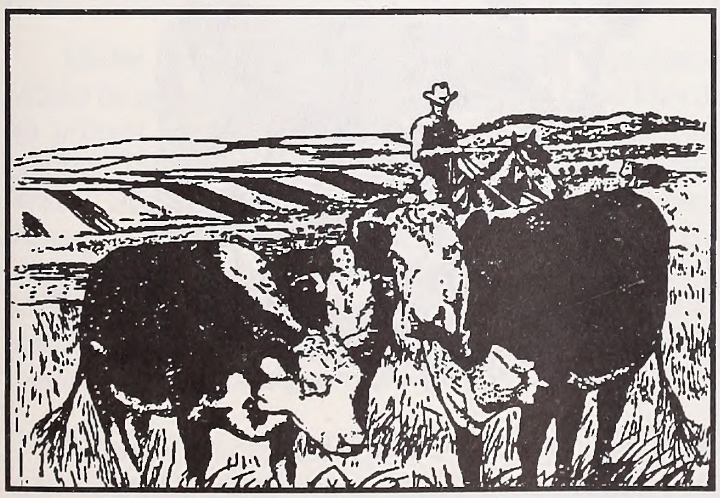
Some special designation areas would be closed to woodland harvest. Some of these areas are especially important to firewood and post cutting because of their close proximity to communities. The closure would be an adverse social/economic impact.

IMPACTS TO GRAZING MANAGEMENT

FROM LAND RESOURCES

Potential disposal of 25,188 acres of public land would have a long-term, moderately adverse impact upon grazing permittees due to a loss of acreage for grazing. Salvage or reimbursement for range improvements would be required. Fencing to exclude disposal tracts from an allotment would also result in negative impacts if this were necessary. Disposal of this acreage would result in loss of approximately 1,260 AUMs and $2,340 in grazing fee receipts each year. Range betterment funds would be reduced by approximately $1,170 annually.

Acquisition of 161,800 acres of state land and 21,600 acres of private land under this alternative would have highly positive, long-term impacts on rangeland resources. These are particularly beneficial since lands to be acquired by state and private interests are in the Apache and Navajo counties of the Phoenix BLM District. Upon completion of the exchanges, 9,170 AUMs of forage would be available to produce $17,056 in revenue annually. Of this, $8,528 would be through the range betterment fund. Administrative coordination requirements would be reduced, increasing efficiency. Permittees would conduct business with only one agency instead of two (State Land Department and BLM).



FROM MINERAL RESOURCES

Impacts to livestock operations from mineral development or exploration may be positive or negative. The temporary loss of 750 acres of grazing land is considered insignificant to the region. Reclamation is designed to restore long-term productivity, so there are no long-term impacts to forage production. In some areas, exploration and mining activities have resulted in additional waters which can enhance livestock grazing through better dispersement of stock into under-utilized areas. Mining activities could adversely affect some springs or existing wells by breaching or draining alluvial aquifers, on which an operation may depend.

Upgraded access has provided benefits to some livestock operations by providing all weather access.

Throughout the life of the plan, approximately 1,355 acres of additional grazing lands would be temporarily disturbed as a result of locatable exploration and development activities. Reclamation of these disturbed areas is designed to return them to their original levels of production; therefore, no long-term or significant impacts are anticipated.

Current management practices would allow oil and gas exploration/development to temporarily remove approximately 424 acres of forage-producing lands from grazing. Such impacts are considered temporary because of mandatory reclamation requirements designed to return the area back to its original productivity levels.

FROM SPECIAL DESIGNATIONS

Designation of the Marble Canyon, Johnson Spring, Lost Spring Mountain, Moonshine Ridge, Witch Pool, Nampaweap, and Beaver Dam Slopes ACECs and Paria Plateau RCA would impose long-term, moderately negative impacts to livestock grazing. Management prescriptions for these areas would place constraints on rangeland improvements. Range improvements would be restricted within 100 yards of existing cultural sites. Beaver Dam Slope ACEC would continue to be managed in a manner consistent with the Rangewide Desert Tortoise Plan. The plan imposes constraints which include limiting, precluding, or deferring livestock use to enhance desert tortoise habitat conditions and it restricts some range improvements.

Pinyon-juniper woodland in the Mt. Trumbull RCA has little understory vegetation and low forage production. Treatment through chaining or burning would enhance

rangeland resources. Management prescriptions for the RCA could restrict vegetation treatments to enhance natural values. This could impose a long-term, negative impact of moderate intensity.

Rangeland conditions in the Parashant RCA are expected to improve under this alternative. Reduced numbers and the grazing management system on the allotment will benefit vegetation in the area.

FROM OHV DESIGNATIONS

OHV designations would have a low, negative impact on rangeland management. Closing areas to OHV travel could restrict access to range improvements and cattle monitoring. Limiting access to existing roads and trails would have only a minor impact on rangeland management because permitted users could travel across country. OHV travel would be authorized on a case-by-case basis on designated roads and trails. This could create a hardship on ranchers. Closing roads in the designated to existing roads and trails areas would have a minor impact because only roads not needed for resource management would be closed.

FROM SPECIAL STATUS SPECIES

Management prescriptions from the Beaver Dam desert tortoise ACEC, the Rangewide Desert Tortoise Plan, and biological assessments of livestock grazing impacts on tortoise habitat could place constraints on new range improvements, season of use, utilization levels, stocking rates, and management, including limiting, precluding, or deferring livestock use. This could impose long-term, highly negative impacts upon the livestock grazing permittee.

FROM WATERSHED

Placing 48 allotments in watershed Category 1, 59 allotments in Category 2, and 46 allotments in Category 4 to initiate intensive watershed management could conserve topsoil and improve vegetation as well as water. These factors would have a beneficial effect on rangeland condition and subsequently, rangeland resources. Healthy rangelands are essential to sustained resource production. In some cases, less water runoff could cause livestock water reservoirs to be dry or short of available water.

Watershed disturbance from mining activity would not affect rangeland resources because of the limited acreage involved and rehabilitation requirements placed on surface-disturbing activity.

CONCLUSIONS

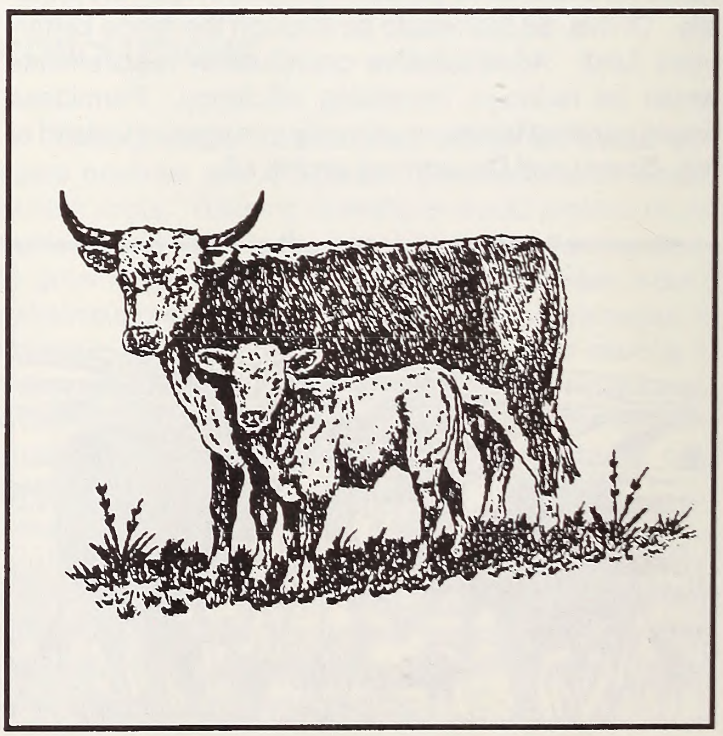
Disposal of 25,188 acres of public land would reduce acreage used for livestock grazing. Approximately 1,260 AUMs and $2,340 in grazing fee receipts would be lost each year. Range betterment funds would be reduced by approximately $1,170 annually.

Acquisition of 161,800 acres of state land and 21,600 acres of private land would potentially increase public land AUMs by 9,170. This could result in grazing fee receipts of $17,056 and allow $8,528 of new range betterment funds each year. Administrative efficiency could also be improved by eliminating the need to coordinate with the state on grazing matters and by eliminating exchange of use permits.

Negative impacts to grazing management would result from ACEC designation and actions from the biological assessment of livestock grazing in tortoise habitat. Constraints would be placed upon livestock grazing options and range improvements.

Rangeland productivity would be enhanced by implementation of intensive watershed management. Reservoir water storage may be diminished by reduced overland water flows.

OHV designations would have minimal, negative impacts since travel would be allowed only for permitted uses.



IMPACTS TO WILDLIFE RESOURCES

FROM LAND RESOURCES

Land acquisition could positively affect wildlife by acquisition of high value habitat such as crucial summer or winter ranges and riparian areas. Land disposals or acquisitions must be in the public interest and; therefore, in most cases, would have beneficial impacts to wildlife.

FROM MINERAL RESOURCES

Locatable mineral operations exceeding casual use in areas not closed to OHV use require the submission of either a notice or plan of operation. In areas closed to OHV use, an approved plan of operation is required for any proposal to use motorized vehicles as a means of access. Through review of a plan of operation, impacts to wildlife species are analyzed in an environmental assessment. Impacts to various wildlife species from mineral operations can range from minor disturbance to displacement for the duration of the operation. The projected 1,355 acres of disturbance from locatable mineral resource exploration and development would not have a significant impact on wildlife. Impacts are usually minor, but could be locally significant with intense activity during periods of reproduction. Loss of habitat is usually minor and mitigated through reclamation.

Geophysical operations used in the exploration for oil and gas are very short-term. Impacts associated with this type of activity can, however, be adverse to wildlife species residing in the area, particularly if the activity occurs during sensitive breeding periods. Bighorn sheep may be particularly affected by this type of activity. However, most of the bighorn sheep habitat is located in wilderness areas and not subject to this type of impact.

Under the proposed plan, oil and gas exploration would be allowed only between December 1 and May 31 to protect bighorn sheep during the critical lambing period. This restriction would apply to the lower Grand Wash Cliffs between the Grand Wash Cliffs Wilderness Area and Lake Mead National Recreation Area. The remainder of bighorn sheep habitat in the district is located within wilderness where operations are prohibited. These restrictions avoid the potential for a moderate negative impact to bighorn sheep reproduction.

A longer time period is normally required for oil and gas drilling and production. Drilling operations typically take up to 4 months. Production operations can last for many years. This intense activity could cause dislocation of wildlife in the immediate vicinity of operations for the duration of operations. This is particularly significant during critical reproductive periods. If exploration is intense, loss of habitat through cumulative surface disturbances can become significant. Even though both short- and long-term impacts to wildlife habitat could occur as a result of oil and gas exploration and development, long-term impacts would be mitigated through reclamation and seasonal restrictions.

FROM WILDLIFE RESOURCES

Under the proposed plan, a positive impact to wildlife resources would be expected. Wildlife species would be protected from mineral leasing during certain times of the year. This helps maintain reproduction for important species. Bighorn sheep populations would be managed according to the biological capacity of the range. Changes in kind of livestock from cattle to sheep and/or goats would not be authorized within or adjacent to occupied bighorn sheep habitats unless monitoring studies and research indicate a disease transmission problem does not exist. Pronghorn antelope populations would be managed to levels compatible with rangeland resources.

Increased monitoring of wildlife habitats and wildlife objectives would be accomplished to provide data relevant to future revisions of the six HMPs.

FROM RIPARIAN

Increasing management and working to improve riparian conditions would have highly beneficial impacts to wildlife resources as habitats and species diversity improve. Efforts to inventory and describe riparian areas would eventually improve riparian conditions as the information is used to improve management. Designating the Virgin River as an ACEC would provide necessary management direction, such as requiring a plan of operation for proposals to develop locatable minerals.

FROM FOREST/WOODLAND RESOURCES

Establishing woodcutting areas for personal and commercial harvest would have a positive impact to wildlife resources from two perspectives. It would reduce the amount of indiscriminate woodcutting, including green trees that provide important nesting or feeding habitat. It would concentrate cutting in selected areas to help meet wildlife objectives such as adding diversity to closed tree stands.

Since wildlife needs and enhancement opportunities are an integral part of the planned forest management program, wildlife species are expected to benefit from maintenance and improvement of their habitat. The extent of the benefits depends on the specific elements of the program to be cooperatively developed with the Arizona Game and Fish Department for the Mt. Trumbull and Parashant RCAs. Benefits would be derived by maintaining and protecting over the long-term the forest ecosystem on which they depend and by improving the quality of habitat regarding such factors as interspersion, edge effect, roosting sites, forage, and cover. Potential adverse impacts which need to be considered in designing and implementing the program are habitat changes which displace wildlife, removal of old-growth stands upon which some wildlife species closely depend, removal of individual ponderosa pine which are important for roosting or brood-rearing, and elimination or drastic reduction of food sources or nesting habitat in prescribed burn operations.



FROM WATERSHED

Watershed categorizations and subsequent management and improvements would improve overall wildlife habitat values. Cover and forage values would increase as projects are implemented and management is improved.

FROM OHV DESIGNATIONS

Controlling OHV use on the district would have a beneficial impact on wildlife. General public use would be prohibited in certain areas or confined to existing or designated roads and trails, except for 800 acres that would be designated as open. This open area is located near Fredonia and contains marginal wildlife habitat. Damage to habitat and disturbance of wildlife species would be reduced due to the proposed restrictions (eliminating unauthorized cross-country travel).

FROM GRAZING MANAGEMENT

Prohibiting changes in livestock classes from cattle to domestic sheep on bighorn sheep ranges would avoid serious conflicts with bighorn sheep.

FROM SPECIAL DESIGNATIONS

Designation of the Parashant RCA and subsequent management prescriptions would have positive impacts to wildlife resources. Restricting certain land use actions, including OHV, would benefit wildlife. Managing the ponderosa pine forest and grazing to complement wildlife, watershed, or other resource values would have positive effects.

Acquiring state and private lands in the Mt. Trumbull RCA would enhance wildlife values by adding habitat under multiple use management. Reducing overall surface disturbance, increasing habitat qualities, and managing the area to conserve rather than obligate resource components would have positive impacts to wildlife values. Managing for a mature component of the ponderosa pine forest would be highly beneficial to wildlife.

CONCLUSIONS

Lands acquisition could positively affect wildlife by securing additional habitat. Exchanges may also be beneficial because high value habitat such as crucial summer or winter ranges could be acquired.

Improved watershed management to reduce soil loss would result in positive benefits to a broad diversity of wildlife species and habitat. In areas closed to OHV use, an approved plan of operations is required for locatable mineral operation. Wildlife resource values would also benefit from oil and gas lease stipulations designed to protect wildlife species and habitat. Actions proposed in the Mt. Trumbull and Parashant RCAs would provide positive impacts to wildlife resource values.

Management of ponderosa pine forests as provided for under the proposed plan would ensure continued quality wildlife habitat for those dependent species.

IMPACTS TO RECREATION RESOURCES

FROM LAND RESOURCES

- Land Ownership Adjustments

Implementation of the proposed plan would make available 7,405 acres of lands for sale or exchange. An additional 17,783 acres could be used for exchange or conveyance subject to the R&PP Act, if shown to be in the public interest. All other land would be segregated against transfer to other ownership and agricultural entries (Map II-3). Up to 25,188 acres could be removed from public land management and any recreation opportunities associated with those acres such as sightseeing, OHV use, and gathering forest products could also be lost. Moderate adverse impacts could result from such a loss. Some potential requests under the R&PP may enhance urban-oriented recreational opportunities in the form of public parks.

Implementation could result in acquisition of 161,800 acres of state land and 21,600 acres of private land (Map II-3). All acquired lands would be subject to operation of all public land laws unless specifically modified by the opening orders associated with specific acquisitions.

Overall, the variety of recreational opportunities described in Table III-20 and activities described in Table III-22 are expected to be enhanced through better management, more consistent direction, and increased regulation of natural settings.

- Airports

Implementation of the proposed plan would result in continued administration of existing airports and include the expansion of the Colorado City airport in coordination with Arizona Department of Transportation (ADOT) and the Federal Aviation Administration (FAA).

Continued administration of existing airports would have only minor adverse impacts to recreational opportunities dependent on remote natural settings. These impacts are generally associated with intermittent landings and takeoffs which create noise disturbance in adjacent areas.

Realistically, few proposals are expected throughout the life of the plan. However, removing any lands from public ownership could encumber or eliminate opportunities for recreation as described in Table III-22. If such proposals are submitted, mitigation would be applied to reduce impacts to recreational settings and opportunities.

- Communication Sites

Under the proposed plan, expansion of the Black Rock Mountain communication site would not be allowed. A new communication site would be established on Seegmiller Mountain. The presence of the Black Rock Mountain communication site would continue to moderately affect the opportunity to experience the natural settings in the area. These adverse impacts dissipate quickly as the user moves away from the facility.

- Withdrawals

Implementation of the proposed plan would result in more acreages of withdrawal revocations than current management.

Impacts to existing recreational settings would be low from surface-disturbing activities resulting from any withdrawal revocation.

FROM CULTURAL RESOURCES

Implementation of the proposed plan would designate six cultural ACECs, approximately 18,710 acres. In almost all cases, ACEC designations would enhance or protect sensitive resource values including opportunities to enjoy natural settings and view historic and prehistoric cultural resources. As such, high beneficial impacts are expected for recreational settings and associated opportunities.

FROM WILDLIFE RESOURCES

Implementation of the proposed plan would result in continued wildlife management in accordance with the six existing HMPs. These plans emphasize species and habitats which provide the greatest recreational and aesthetic returns including both consumptive and nonconsumptive use such as desert bighorn sheep, mule deer and pronghorn antelope.

Additional efforts will be made to monitor project success, identify limiting habitat factors, and improve project maintenance. Emphasis would be placed on monitoring to determine habitat potential and provide input to Arizona Game and Fish in optimizing wildlife

numbers consistent with other resource values. Resulting impacts of enhanced wildlife management could provide greater recreational opportunities for viewing or hunting users and therefor would be more beneficial than under current management.

The removal of the bighorn sheep exclosure in the Paiute Wilderness will have short-term, adverse impacts during the actual removal, but the long-term impacts would enhance the natural setting in the wilderness.

FROM RIPARIAN

By designating the Virgin River bottomlands as an ACEC, impacts on certain recreation opportunities such as nature study, hiking, sightseeing, and rafting would be primarily beneficial. Adverse impacts to OHV recreation would occur from more restrictive OHV designations. Any acquisition of private inholdings would ensure public access along the river corridor resulting in low-to-moderate, beneficial impacts to recreation.

Continuing the mineral withdrawal in the Virgin River Gorge, requiring a plan of operations for mineral activities outside the gorge, and stipulating no-surface occupancy for oil and gas leases within the gorge would help protect recreational opportunities associated with a riparian setting.

Acquisition of instream water rights would ensure continued opportunities for water-related recreation activities, such as rafting and kayaking.

FROM FOREST/WOODLAND RESOURCES

Fuelwood cutting would occur on small areas (5-10 acre clear-cuts) within these 739,300 acres. The small areas could moderately compromise recreation opportunities for non-woodcutting visitors seeking outdoor experiences in semi-primitive settings. This could affect 15,000 to 30,000 more acres of lands having semi-primitive settings than current management.

The proposed plan would, in allowing fuelwood and Christmas tree cutting, provide good opportunities to those who enjoy these uses as recreational pursuits. Fuelwood cutting could occur on 739,300 acres rather than the 21,780 acres under current management over the life of the plan.

The proposed plan focuses greater attention on the management of woodland products through the use of woodland management plans than under current management. This, combined with standard operating procedures (e.g., issuing permits, signing and monitoring), would be beneficial to the preservation of semi-primitive and roaded natural settings by ensuring fuelwood cutting occurs only in designated areas. At any one time in the life of this plan, cutting would occur on an estimated 1,000-2,000 acres.

The planned forest management program would have both short-term, adverse impacts and long-term, beneficial impacts on aesthetics and recreation values and users. Short-term, adverse impacts would result from activities such as selective thinning and prescribed burns which increase vehicle activity and noise and cause visible changes in the forest which in turn adversely affect the recreational experience of some visitors who may be in the treatment areas.

Accomplishment of the planned forest management objectives (Table II-1) would over the long-term enhance recreational settings and biological diversity. This should enhance the recreational experience of some visitors.

FROM SPECIAL STATUS SPECIES

ACEC designations for special status plants (*P. sileri* and *P. bradyi*) would close 10,700 acres to OHV use and limit 4,200 acres to designated roads and trails. The 10,700-acre closure in the Marble Canyon ACEC would reduce OHV recreational opportunities there. The limited to designated roads and trails designation on the Johnson Spring, Moonshine, Lost Spring Mountain, and Fort Pierce ACECs would reduce OHV opportunities on 4,200 acres. The Beaver Dam ACEC (20,800 acres), designated for the protection of desert tortoise, would be closed to OHV use.

These closures or restrictions on OHV opportunities would benefit those seeking recreation experiences such as hiking, nature study or camping away from OHV use areas.

FROM TRANSPORTATION/ACCESS

Implementation of the proposed plan would prohibit new permanent roads within the planning area. If new roads are necessary, they would be temporary and would be rehabilitated when their usefulness has ended, creating beneficial impacts. In areas of special designations, some roads may be closed, creating both positive and negative impacts. Realignment of the Arkansas Ranch Road would be allowed.

FROM MINERAL RESOURCES

Since 1980, locatable mineral exploration and development activities have caused 750 acres of surface disturbance. An additional 1,355 acres could be disturbed during the life of this plan.

Exploration would have minor adverse impacts to recreation settings and associated opportunities for backcountry activities through temporary access construction, drilling operations and certain reclamation operations. Given the generally dispersed nature of drilling activities and the limited duration, overall impacts to recreation settings are considered minor.

Mining operations would have moderate, adverse impacts to recreational settings and some backcountry recreational opportunities such as hiking, camping, or viewing natural landscapes. Of the above 1,355 acres, approximately 240 acres would be disturbed by the actual mining operations. In the immediate vicinity of the mine site, backcountry recreational opportunities are degraded by construction, operation and ancillary operations such as hauling or powerlines. Reasonable reclamation of mining and exploration activities would be required after operations have been completed. Such facilities contribute to the negative perceptions of visitors seeking more primitive recreation experiences that require remote settings. On the other hand, temporary haul-road development or upgrading may facilitate other forms of recreation that do not rely on remoteness, such as OHV use or driving for pleasure. The degree to which the projected mining or exploration impacts would affect opportunities for primitive recreational experiences which rely on remoteness is unforeseeable. Throughout the life of the plan only a limited number or small percentage of the total projected activities could occur in the most remote areas of the district. Many of these activities, however, are occurring in the vicinity of the Mt. Trumbull road and the Kanab plateau, an important recreation area associated with Toroweap overlook in Grand Canyon National Park.

In areas of special designations, management focus and attention would be designed to protect special scenic values and remoteness. Impacts from mining and exploration would be subject to special stipulations and mitigation to prevent long-term or permanent change in these sensitive areas. Recreational opportunities that depend on remote settings would be protected.

Under current management, oil and gas activities have caused some short-term impacts to recreational settings and backcountry opportunities by causing surface and vegetation degradation through access construction, drilling and other associated activities. These impacts were caused by 43 oil and gas wells that have been drilled since 1909. These impacts are all, however, short-term.

Limited active exploration occurs east of Fredonia in an area that is not considered to provide high-value backcountry recreational opportunities. Impacts to OHV use or hunting from oil and gas activities have been minor. However, under current management practices the potential exists for recreational opportunities for backcountry activities such as hiking, camping, or viewing natural landscapes in higher-value recreation areas to be severely degraded during oil and gas exploration or development. Current management provides that all oil and gas leases contain only standard stipulations which may not be enough to prevent impacts to high-quality recreation activities.

Other recreational settings and associated opportunities would be enhanced and protected by special designations which would require leasing restrictions designed to prevent direct surface disturbance. Specifically, leases within the Virgin River Gorge, Kanab Creek and Grama Canyon would include no-surface occupancy lease restrictions to prevent surface impacts, thus protecting important scenic and recreational settings. Other areas with these stipulations on 30 percent or greater slopes are Moccasin Mountain, the Hurricane Cliffs, Diamond Butte, upper and lower Grand Wash Cliffs, Parashant, Andrus and Dansil canyons. Such restrictions indirectly benefit recreationists by protecting the physical setting. Appendix 9 describes leasing restrictions.

Throughout the life of this plan, approximately 415 acres could be disturbed from oil and gas activities. Most of the sensitive recreation areas occur in areas having low potential for oil and gas. Assuming that some disturbance occurs in more sensitive recreation settings, moderate-to-high, adverse impacts to backcountry activities are anticipated.



FROM RECREATION RESOURCES

Recreation management under the proposed plan would provide a much greater focus on management adjustments and changes to the amount or type of visitor use, visitor use patterns, experience opportunities or visitor needs than current management. In the long-term, such management would be much more responsive to change, resulting in benefits to visitor experience opportunities described in Table III-20, various types of activities described in Table III-22 and the settings on which these opportunities depend.

Establishment of the Parashant and Mt. Trumbull RCAs as well as the Canyons and Plateaus of the Paria RCA, with their associated management prescriptions, would focus management on providing and maintaining moderate-to-high quality recreational settings on 386,000 acres. Activity plans for these areas and improvement of visitor services are significant actions which would contribute to more intensive recreation management in these areas.

The remainder of the district would consist of large, extensive recreation management areas (ERMAs) with overall management direction coming from the guidance defined in the plan's objectives and guidelines. A portion of the district would focus on providing opportunities for visitors to engage in a variety of recreational activities (Table III-22) in settings ranging from roaded natural to semi-primitive non-motorized. In other remote areas within the district, emphasis would be shifted slightly towards providing opportunities for various activities (Table III-23) that typically take place in more primitive settings.

Providing a wider variety of recreational opportunities in the Virgin River Campground is expected to increase use by approximately 50 percent, from 62,600 to 93,900 visitor hours. The transportation/access prescriptions allowing only temporary upgrading of existing roads and new roads on a temporary basis could cause short-term, adverse impacts on recreational settings but would have beneficial results by maintaining settings over the long-term. Upgrading the campground loop and access roads would be beneficial to campground users.

Non-motorized recreational opportunities such as hiking or backpacking would be improved by the proposed limited to designated roads and trails OHV designation. However, recreationists preferring to use some type of motorized vehicle in their recreational pursuits would be adversely affected.

FROM WILD & SCENIC RIVERS

A portion of the Paria River has been identified as suitable for designation as a Wild and Scenic River. Virgin River segments eligible for study have been assigned potential classifications of wild, scenic, and/or recreational (Appendix 18). Eligibility for designation or study places these rivers under BLM provisions for interim management. Under these provisions, management would provide greater protection and, where possible, enhancement of outstanding and remarkable river values. The free-flowing characteristics of the river segment would not be modified.

Opportunities to engage in various types of primitive recreation activities along those portions of the Paria and Virgin rivers classified as wild and/or scenic are both regulated and protected by current habitat management practices established by wilderness designation and the Endangered Species Act. Under interim management guidelines, opportunities for recreational activities such as rafting and kayaking could be moderately enhanced through new developments along segments of the Virgin River classified as recreational. Proposed access routes and recreation-related developments along the shoreline would be evaluated on a case-by-case basis. Interim management guidelines prior to Wild and Scenic River designation require that BLM oppose construction of impoundments or other flow restrictions under consideration which could affect segments of the Paria or Virgin Rivers.

FROM OHV DESIGNATIONS

Management of OHV use under the proposed plan would establish designations throughout the district, maintaining or enhancing opportunities for visitors seeking non-motorized, semi-primitive experiences on 358,600 acres closed to OHV use. The remaining land is either limited to existing roads and trails (1,541,200 acres); limited to designated roads and trails (646,800 acres); or open (800 acres). These districtwide designations would help maintain semi-primitive and roaded natural settings by directing OHV use to roads and trails rather than allowing indiscriminate OHV activity. Such designations help maintain physical and social settings, which provide the basis for recreational opportunities.

Since there are 5,402 miles of roads and 4-wheel drive trails in the district, the proposed plan would only slightly affect opportunities for the majority of OHV visitors to enjoy backcountry driving experiences. The impacts would come in areas where some existing roads would be closed.

The proposed plan would develop OHV management plans and disseminate information regarding OHV opportunities and regulations to the public. This is a significant and positive change from current management.

FROM VISUAL RESOURCES

The proposed plan provides for classification of 2,000 additional acres as visual resource management Class I over current management. The Virgin River Corridor ACEC is classified as VRM Class I. An additional 838,000 acres are classified as Class II. Travel corridors have been classified Class II, affording protection of scenic values along proposed scenic and backcountry byways and other main access routes. VRM class objectives provide management guidelines for determining the type and degree of mitigation for proposed projects and developments. The addition of Class I and II areas should enhance recreational opportunities for visitors seeking remote and primitive recreation experiences. OHV use in the Virgin River Corridor ACEC from the mouth of the gorge to the Nevada state line could be restricted in this classified Class I area.

CONCLUSIONS

Land transfers under the proposed plan would create moderate adverse impacts due to removal of these lands from public ownership. The public would lose recreation opportunities once available on those lands, such as sightseeing, OHV use, camping, and gathering forest products. Acquisitions would create moderately positive benefits to recreational opportunities described in Table III-20, by placing these lands into public ownership and under the extensive recreation management policies of the district.

Airport grant or lease processing outside specially designated areas would assure continued protection of recreation settings from airport impacts. Airports would create moderate, adverse impacts to visitor experience opportunities in the vicinity of these airports. However, they also benefit some recreational users.

Recreational settings could be moderately affected by a piecemeal proliferation of communication sites on high peaks. Opportunities to experience remote, natural settings would be degraded by surface and vegetation changes and structures in these areas. Impacts would dissipate as users move away from the facilities.

Management of cultural resources would result in positive impacts for most visitors by adding some 18,710 acres of ACECs. These designations would enhance protection of sensitive values in these areas.

Wildlife management under the proposed plan would increase hunting and viewing opportunities, creating positive impacts for recreation users.

Riparian management, specifically the Virgin River Corridor ACEC designation, would positively affect recreational settings. Ensuring public access, improving the riparian setting, and making the campground available to a wider range of users would improve the variety of recreational opportunities on 8,100 acres along the river. Limiting OHV opportunities to designated roads and trails would negatively affect recreation opportunities associated with motorized vehicles.

Fuelwood cutting would compromise other forms of non-motorized recreation such as hiking, backpacking, or nature study. Activity plans would place greater emphasis on woodlands management. This could contribute significantly to preservation of natural settings and associated opportunities.

For the life of this plan selective ponderosa pine thinning, disease control and prescribed burns would have adverse impact to users seeking remote alpine and semi-primitive experiences in these areas. Indirect impacts of thinning operations such as increased access would also compromise these uses.

OHV opportunities would be eliminated from 10,700 acres along the Marble Canyon rim and 20,800 acres in the Beaver Dam ACEC. OHV opportunities would be limited to designated roads and trails on 4,200 acres of *P. sileri* habitat in the Johnson Spring, Lost Spring Mountain, and Moonshine Ridge areas.

Greater emphasis would be placed on protecting and maintaining special scenic values and remoteness while managing oil and gas leasing and mineral exploration in specially designated areas. Indirect impacts associated with haul-road development on recreational settings and associated opportunities would most likely continue throughout the life of the plan, but eventually would be eliminated through mitigation and reclamation.

More restrictive management of OHV use would result in enhanced recreational opportunities for most users seeking experiences that tend toward the semi-primitive and non-motorized end of the recreation spectrum. In addition, designated open OHV areas would meet the needs of users near growing communities.

Recreational opportunities such as rafting, kayaking, and nature study would be enhanced in the lower Virgin River area under interim management guidelines effective during suitability studies for potential designation as a wild and scenic river. River access and improvements to areas classified as recreational would be evaluated and mitigated in accordance with BLM policies. The Virgin River Corridor ACEC, designated as VRM Class I, may enhance recreational settings by providing management guidelines for mitigating the visual contrast from proposed improvements. Beneficial impacts associated with Wild and Scenic Rivers would protect and enhance existing remote, backcountry recreational opportunities associated with these areas.

IMPACTS TO VISUAL RESOURCES

FROM LAND RESOURCES

- Land Ownership Adjustments

Land transfers to other ownership under this alternative could have adverse impacts on visual resources on 25,188 acres. In those areas, R&PP grants or exchanges could result in land development, structures, or surface disturbances that moderately contrast with existing visual quality.

Additionally, these lands would no longer be subject to visual resource management objectives, as they would pass out of federal stewardship.

Implementation of the proposed plan would result in acquisition of 183,400 acres of state and private lands. Attempts would also be made to acquire high value riparian areas. Impacts resulting from these acquisitions would be moderately positive for visual resources in the district, as they would be managed under VRM guidelines and objectives. Future development activities would be mitigated to reduce visual impacts by reducing contrasts to blending with the basic form, line, color and texture of the affected landscape. This would be developed concurrently as part of the NEPA_process, when proposed disturbing activities would be analyzed.

- Airports

Implementation of the proposed plan would result in continued administration of existing airports. New requests would be considered on a case by case basis. Colorado City airport would be expanded in coordination with ADOT and the FAA.

Under the proposed plan, visual resources would be degraded in the immediate area of such proposals. The basic elements of form, line, color, or texture would be permanently change. Therefore, VRM mitigation measures would not be effective in reducing these impacts. Realistically, few proposals are expected throughout the life of the plan, so moderate-to-high, adverse impacts to VRM are not expected.

- Communication Sites

The establishment of a new communication site on Seegmiller Mountain would result in moderate, adverse visual impacts at the site. There is already access to the site.

- Rights-of-Way Corridors

Designating an additional right-of-way corridor via the Lime Kiln/Rosy Canyon route could have moderate to highly significant adverse impacts to visual resources along a 70-mile strip depending on the type of use in the corridor. An underground line and associated maintenance road would produce moderately adverse changes in color and texture. An aboveground electric transmission line and its maintenance road would produce changes in line, color, and texture that would range from moderate to highly adverse, depending on the size of the line and the type of mitigation used. Adverse impacts would affect 276,000 acres of Class I; 838,000 acres of Class II; 528,000 acres of Class III; and 1,481,000 acres of Class IV areas. The significance of the impacts would vary with the VRM class, with Class I being most adversely affected and Class IV, the least.

FROM WILDLIFE RESOURCES

Implementation of the proposed plan is not anticipated to have significant adverse impacts to the visual resources on the district as a whole. However, minor site-specific impacts could occur as a result of construction of various projects identified in HMPs. Such impacts can usually be mitigated to acceptable levels of contrast, using basic VRM techniques. Mitigation of site-specific impacts would be identified during the NEPA_process.

FROM RIPARIAN

Classifying 8,100 acres as VRM Class I in the Virgin River Corridor ACEC would have a moderately beneficial

impact on visual resources by ensuring that the existing scenic quality along the river would not be compromised.

FROM FOREST/WOODLAND RESOURCES

Green fuelwood cutting on up to 739,300 acres and cutting of dead-and-down wood could eventually change the existing form, line, color and texture in the cutting areas by removing trees. The visual contrast brought about by such a change would primarily affect VRM Class III and IV areas. The expected contrasts would not be significant in these classes--where visual changes are generally more acceptable. However, any changes in Class II areas could adversely affect visual resources to a moderate degree. Management of travel corridors along primary travel routes in the district would benefit visual resources by ensuring that fuelwood cutting areas remain outside the corridors identified for these routes. This would have a greater beneficial impact than current management, since primary travel routes would be included.

Christmas tree cutting throughout the pinyon-juniper woodlands of the district (exclusive of wilderness) would not adversely affect visual resources.

Standard operating procedures (issuing permits, signing and monitoring) would contribute to maintaining visual quality in areas not designated for woodland product use by limiting fuelwood cutting in only designated areas.

The planned forest management program would have both short-term, adverse impacts and long-term, beneficial impacts on aesthetics and recreation values and users. Short-term, adverse impacts would result from activities such as selective thinning and prescribed burns which increase vehicle activity and noise and cause visible changes in the forest. These in turn adversely affect the recreational experience of some visitors who may be in the treatment areas.

Accomplishment of the planned forest management objectives (Table II-1) would, over the long-term, enhance recreational settings where forest conditions are stagnant and biological diversity is lacking. This should enhance the recreational experience of some visitors.

FROM TRANSPORTATION/ACCESS

Implementation of the proposed plan would result in maintenance of existing access and provide new access where needed to support resource management programs. No permanent roads would be allowed in areas of special designations. However, realignment of the Arkansas Ranch Road would be allowed.

During the life of the plan, relatively few new roads are anticipated to be needed for resource management. Those few impacts that could result are anticipated to be relatively minor, and mitigation would be used to reduce visual contrast associated with access development. Overall, impacts are anticipated to be minor.

Impacts from the proposed plan to areas with special designations are anticipated to be moderately adverse, because of the sensitive resource values. However, since no permanent access would be allowed, negative impacts to visual resources would be considered temporary, and no long-term or irreversable impacts would occur. No permanent changes in social settings or the remoteness criteria in this area would occur and the natural setting as it is now would ultimately be maintained.

FROM MINERAL RESOURCES

Locatable mineral exploration and development activities have created temporary adverse impacts to VRM classes I-V. These impacts create or cause varying degrees of acceptable or unacceptable visual contrasts depending on the sensitivity levels of the VRM class. Since 1980, only two mining activities have taken place in Class I VRM areas. As a result, in the immediate area of impact, these visual classes have been temporarily degraded to Class V VRM areas.

It is reasonable to assume throughout the life of this plan, that at least three or more Class I, high-sensitivity areas would be temporarily degraded, from mining activities. Short-term impacts from exploration or development may cause temporary levels of visual impacts in higher-level scenery classes. Given the mandatory reclamation requirement of this program, however, no significant long-term impacts to visual resources are anticipated.

Areas of special designations could incur moderately adverse impacts during mining and exploration. Haul roads or powerline development associated with mining activities would also affect these areas. These ancillary activities would create visual contrasts in the VRM classes. As a result of increased management focus and attention, however, high-value scenic areas would be subject to special stipulations and mitigation designed to protect the scenic quality.

This alternative would cause beneficial impacts to visual resources in certain areas by designating the Virgin River Gorge, Kanab Creek, and Grama Canyon as no-surface occupancy to leasable minerals. No-surface occupancy on slopes of greater than 30 percent for Moccasin Mountain, Hurricane Cliffs, Upper and Lower Grand Wash Cliffs, Dansil, Andrus, and Parashant Canyons would also benefit visual resources. There could be low-to-moderate, adverse impacts to visual resources in other areas where no special stipulations exist to protect scenic values. Reclamation would heal scars with time.

FROM RECREATION RESOURCES

Recreation management under the proposed plan would focus on maintaining or enhancing a variety of physical and social settings within the district. As such, management of the particular details of the physical setting, i.e., the noticeability of developments and other man-induced changes, would be a more important consideration in day-to-day management. Visual resources, as a component of physical settings, would receive greater management than under current management, which could contribute to the long-term maintenance of visual quality.

Management prescriptions proposed for the Parashant, Mt. Trumbull, and the Canyons and Plateaus of the Paria RCAs would significantly benefit the maintenance of visual quality in these areas by virtue of the constraints placed on development.

FROM WILD & SCENIC RIVERS

The Virgin River from the campground to the Nevada state line has been proposed for study as recreational under the provisions of the Wild and Scenic River Act. Interim management guidelines allow for review of proposed improvements and increased accessibility to the river. Developments, even with mitigation, would fail to meet objectives for VRM Class I areas. Developments may adversely affect the form, line, color, and texture of the site, eventually requiring change in VRM classification.

FROM OHV DESIGNATIONS

The districtwide OHV designations would provide greater protection to visual quality on 93,000 acres closed to OHV use (in addition to 265,600 acres already closed by wilderness designation). The remaining land is either limited to existing roads and trails (1,541,200 acres); limited to designated roads and trails (646,800 acres); or open (800 acres). The designations would contribute to the protection of visual quality by directing OHV use to roads, trails and open areas rather than allowing indiscriminate OHV activity. Such designations contribute to the protection of visual resources by controlling OHV use in areas as one possible source of visual contrast.

Visual quality on public lands in the Fredonia open area could be highly affected by intensive use; however, by providing open areas, the potential for impacts to visual resources on adjacent lands could decrease to a moderate degree.

FROM VISUAL RESOURCES

Classification of 751,400 additional acres as VRM Class I and II over those described under current management would enhance the scenic quality of these areas. Management focus would be toward preserving scenic values and monitoring visually sensitive areas, with specific guidelines for mitigation. Travel corridors would be managed as VRM Class II and would be afforded a greater degree of protection from changes.

CONCLUSIONS

Land transfers would result in 25,188 acres that would not be managed under VRM objectives. Adverse impacts to visual resources could occur when areas are transferred for development purposes. Positive impacts could occur if transfers resulted in an R&PP grant for the development of a park for recreation.

Acquisitions would result in beneficial impacts as acquired lands would be managed under VRM objectives and guidelines.

Grants or leases for airport use would only be allowed outside specially designated areas. Visual resources would be degraded in the immediate area of these facilities. No such requests for airport facilities would be considered within these special areas.

The Lime Kiln/Rosy Canyon right-of-way corridor could have moderate-to-high, adverse impacts to visual resources depending on the visual resource management class, sensitivities, and mitigation measures.

Wildlife management would create minor, site-specific adverse impacts associated with limited project construction identified in the HMPs.

A Class I VRM classification in the Virgin River Corridor ACEC would have beneficial impacts on 8,100 acres by ensuring that the existing scenic quality is maintained.

The Virgin River Corridor ACEC could be affected by developments in segments classified as recreational under the provisions of the Wild and Scenic Rivers Act. Significant developments could require site-specific changes to VRM classifications. The 751,400 additional acres added to the VRM Classes I and II would afford greater protection of scenic values.

Forest management would improve the diversity of vegetation and health of the ponderosa pine, enhancing visual quality.

Transportation management would create only minor adverse impacts to visual resources given the few roads anticipated for resource management. Impacts to specially designated areas as a result of road construction would be moderately adverse given the higher scenic values of these areas; however, only temporary roads would be allowed.

High quality scenic values would be maintained by use of no-surface occupancy stipulations in leases and authorizations. Visual resource management would be enhanced as more acres are placed in higher scenic and sensitivity classes.

IMPACTS TO WILDERNESS

FROM LAND RESOURCES

- Communication Sites

Implementation of the proposed plan would disallow expansion of the Black Rock Mountain communication site and establish a new communication site on Seegmiller Mountain outside of wilderness. The presence of the Black Rock Mountain communication site would continue to moderately affect user opportunities to experience the natural settings in the area. These adverse impacts dissipate quickly as the user moves away from the facility. The proposed plan would prevent further impact to wilderness values in the Black Rock Mountain area of the Paiute Wilderness Area.

FROM WILD & SCENIC RIVERS

A portion of the Paria River has been identified as suitable for national designation as a Wild and Scenic River. Virgin River segments eligible for study have been assigned potential classifications of wild, scenic, and/or recreational (Appendix 18). Eligibility for designation or study places these rivers under BLM provisions for interim management. Under these provisions, management would provide greater protection and, where possible, enhancement of outstanding and remarkable river values. The free-flowing characteristics of the river segment would not be modified. Designation would provide long-term benefits to wilderness.

CONCLUSIONS

Prohibiting expansion of the Black Rock Mountain communication site and designating the Paria and Virgin rivers as wild and scenic would provide long-term benefits to wilderness.

IMPACTS TO TRANSPORTATION/ACCESS

FROM ACQUISITIONS

Acquisition of up to 161,800 acres of state land and 21,600 acres of private land would eliminate the need to acquire easements and would have both short- and long-term beneficial impacts.

FROM CULTURAL RESOURCES

Under the proposed plan, selected roads within areas designated as ACECs may be closed or use limited to designated roads and trails to protect cultural values. This could adversely impact the public who may desire to travel into or through one of these areas.

FROM SPECIAL STATUS SPECIES

Under the proposed plan, selected roads within areas designated as ACECs may be either closed, or limited to designated roads and trails to protect special status species. This could adversely affect travelers going into or through one of these areas.

FROM TRANSPORTATION/ACCESS

To help maintain the naturalness and remoteness of the area, new permanent roads would not be allowed. A new road may be allowed for a particular project, but when the project is completed, the road would be closed and rehabilitated. Other roads not needed for resource management may be closed, causing an adverse impact to access.

Acquisition of easements (Appendix 21) across private or state lands would gain legal access on roads, creating a positive impact.

FROM RECREATION RESOURCES

Under the proposed plan, access within the Mt. Trumbull, Parashant, and Paria Plateau RCAs would be limited to designated roads and trails. For those visitors who like additional flexibility to use 4-wheelers, etc., off the designated roads, there could be an adverse impact. Permanent new roads would not be allowed causing further restrictions for some users.

FROM OHV DESIGNATIONS

Designating the entire district as either open, limited to existing roads and trails or to designated roads and trails, or closed would place new restrictions on access and adversely affect OHV users.

FROM MINERAL RESOURCES

Currently the district has 5,402 miles of roads and 4-wheel drive trails. Since 1980, approximately 140 miles of new access have been added in conjunction with locatable mineral resource exploration. In addition, 32 miles of road have been upgraded and four miles constructed for mine development (Map III-8).

All 176 miles of the existing mining-related access would be reclaimed by the company or claimant responsible for the disturbance once exploration or development has been completed. These roads are all relatively short, narrow spur roads originating from existing roads. Impacts to transportation and access from these roads are minor and short-term. Road upgrades and new construction associated with mine development have a greater impact to transportation and access than current roads as these roads are wider and provide all-weather access to many areas.

Over the life of the plan, temporary access associated with exploration could result in approximately 255 miles of additional roads. Approximately 60 additional miles of roads could be upgraded and seven miles of new roads could be constructed in association with mine development.

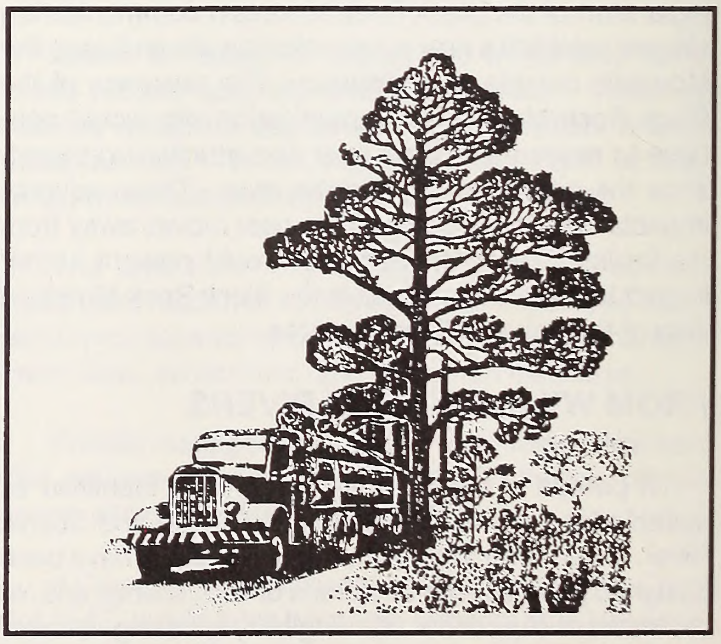
New access not needed for public purposes and BLM programs would be fully reclaimed once mining has stopped. In some cases upgraded roads would be restored to their previous condition. Roads upgraded or constructed in conjunction with mine development would be used for approximately ten years for each mine site.

No new permanent roads have been built in association with oil and gas exploration activity within the district. Though some 43 exploration wells have been drilled in the area, all pads and roads to them have or will be reclaimed following cessation of exploration or development activities. Approximately 415 acres of disturbance are projected from oil and gas exploration and development in the district over the life of the plan. This acreage figure includes new temporary access. Approximately one mile of new road is projected for each well location. For the 52 exploration and production wells which may be drilled over the life of the plan, approximately 52 miles of new temporary access road would be required. These roads would be reclaimed following completion of operations on the well pad and would, therefore, have no significant effect on transportation or access.

CONCLUSIONS

Under the proposed plan, access to certain areas within the district may be more restricted than with current management. OHV designation, RCAs, and ACECs would all further restrict vehicle use causing some negative impacts. Newly constructed permanent access would not be allowed and some existing roads may be closed, causing a negative impact to access.

Acquisition of state and private lands along with other identified easements would benefit access on many important roads where legal access does not occur at present.



IMPACTS TO SOCIO-ECONOMIC RESOURCES

FROM LAND RESOURCES

- Land Ownership Adjustments

Land disposals under the proposed plan could transfer 7,405 acres of public lands out of federal stewardship. If these lands were sold rather than exchanged, the sale of these lands would have a positive economic impact to the counties by increasing their tax base. The sale would also generate revenue for the federal government.

These same 7,405 acres plus an additional 17,783 acres would also be available for exchange or conveyance at low cost to cities or counties under the Recreation and Public Purposes Act, if public interest is shown. This act allows local governments to purchase or lease lands at a reduced cost if for a public purpose. Exchanges are also required to be in the public interest. A beneficial economic or social impact would be realized by these disposals. Site-specific EAs would identify specific impacts.

Acquisition of 161,800 acres of state land and 21,600 acres of private land including the subsurface estate where BLM manages the surface would create a more solid block of public lands for the BLM to manage. Both economically and socially this would be a beneficial impact due to reduced management costs. These lands could also be opened to development under the mineral location and leasing laws possibly creating a beneficial economic impact to both the public and federal government. A loss of tax base when private land is acquired would adversely affect the counties. Site-specific Notices of Realty Actions (NORAs) and EAs would determine specific impacts.

- Communication Sites

By encouraging new communication sites on Seegmiller Mountain and not allowing new sites on Black Rock or Moccasin mountains, a company needing a communication site may need to spend more on access to Seegmiller Mountain to obtain the same or less communication coverage as they could obtain on Black Rock Mountain. This could be an adverse economic impact. Any user requiring electric power would benefit from the Seegmiller location since power is in much closer proximity.

- Rights-of-Way Corridors

The designation of right-of-way corridors across the district would have positive economical and social impacts. Economically, the right-of-way corridors would be designated by this RMP/EIS and could save the cost of extensive EAs and detailed EISs should a proposal be made. Socially, the time saved for this assessment (approximately one year) would be beneficial to the company applying for the right-of-way, the public and the BLM.

FROM CULTURAL RESOURCES

Designation of 227,000 acres of the Plateaus and Canyons of the Paria as an RCA, and 9,800 acres of Lost Spring Mountain and 5,500 acres of Yellowstone Mesa (Moonshine Ridge) as ACECs would close these areas to post cutting and firewood gathering. Since these areas are currently used for this purpose, other possibly more remote areas would need to be utilized, creating an adverse economic and social impact to the public. A proposed airport in the Ferry Swale area may not be allowed under this alternative, creating additional costs and difficulty for the developers to study other sites.

OHV use would be limited within the Canyons and Plateaus of the Paria RCA as it would be in the ACECs and other RCAs. This restriction would be an adverse social impact to users seeking motorized recreation pursuits.

FROM SPECIAL STATUS ANIMALS

Prescriptions for ACECs which limit land actions such as disposals, rights-of-way, and exchanges in the Littlefield/Beaver Dam area for the protection of the desert tortoise, riparian habitat, and native Virgin River fishes could have an adverse social and economic impact on the growth potential of the area. Community expansion could be restricted and made more expensive from tortoise recovery needs, ACEC designations, and management prescriptions.

FROM FOREST/WOODLAND RESOURCES

The designation of cutting areas for commercial and personal firewood would have a positive economic and social impact. These areas would be specially selected for their tree size, road conditions and distance from communities and paved roads. Some areas currently

used by woodcutters in Lost Spring Mountain, Yellowstone Mesa, and Paria Plateau would be closed to such uses if they are designated as ACECs or RCAs. The proposed woodcutting areas selected to replace these areas are farther from communities. This would be an adverse economic impact to residents.

Designations of personal and commercial cutting areas will require commercial cutters to travel farther and incur more expense to harvest products. Personal users would not have to compete with commercial harvesters for products closer to communities.

Opportunities could be lost from the standpoint of commercial forestry, timber harvest and secondary benefits to local businesses and workers in the forest products industry. Although management programs may include ecologically sound and carefully managed silvicultural practices that would make some wood products available for public or commercial use, the proposed forest management is directed toward the enhancement of other multiple uses rather than commercial forestry, timber management or providing large quantities of wood products. Positive impacts are involved from the standpoint of recreation users because aesthetics and naturalness would be maintained.

FROM MINERAL RESOURCES

Continuation of present management would keep most of the district open to mineral exploration with the exception of withdrawn areas. Economic impacts from mineral exploration and production have a positive impact on local economies. It is estimated that uranium mining adds about $50 million a year to these economies and also increases local and state tax bases.

Mining pays the highest weekly earning of any employment sector in the affected counties but accounts for only 1 to 2 percent of the local county employment.

Mining activities have not resulted in large influxes of new people moving into the area. Using mostly local residents for employment has not added stress to the existing socio-cultural structure or stress on existing support services such as hospitals, schools and police.

ACEC designations would raise costs by requiring a plan of operations for all disturbance resulting from operations greater than casual use. Areas closed to OHV use could also create negative economic impacts.

Potential positive socio-economic impacts of oil and gas leasing or potential development would slightly diminish based on seasonal and surface occupancy restrictions. Exploration or production would be more costly in the restricted areas. Marginal exploration targets may not be fully explored.

Meeting special designation management prescriptions could limit the disposal of mineral materials from desirable locations near projects. This could have a negative economic impact on applicants because of additional hauling distance for material.

FROM RECREATION RESOURCES

Under the proposed plan, long-term camping would be allowed in the Virgin River Campground. This would be a beneficial social impact to winter visitors who would like to stay longer than the 14-day limit and at the same time permit better utilization of the campground facilities. The campground is located within the Virgin River ACEC and would provide for this special type of visitor use.

FROM SPECIAL DESIGNATIONS

Designating the Parashant area as an RCA would have beneficial social and economic impacts. An RCA would provide a variety of multiple uses while ensuring that the natural values are not impaired. Allowing permittees to use areas while their allotments are rested would be beneficial to them because they would not have to reduce their operations.

FROM OHV DESIGNATIONS

Designating the entire district as either open, limited to designated roads and trails or to existing roads and trails, or closed, would place new restrictions on OHV enthusiasts. Many areas used as open or limited to existing roads and trails could be further restricted. An adverse social impact would result from closing existing open areas to the public.

CONCLUSIONS

Identified lands could be transferred at low cost to city or county governments under the Recreation and Public Purposes Act for public purposes and benefits.

Acquisition of state and private lands facilitates management of public lands and enhance resource values.

Restricting communication sites on Black Rock Mountain could cause additional costs and limit communication coverage in some areas.

Designating a one mile wide right-of-way corridor across the majority of the district would save time and money for the public and the BLM in processing applications because analysis of the corridor would have been covered in this RMP/EIS. Adverse economic impacts could result from the added cost to analyze, construct and maintain a right-of-way through desert tortoise habitat where a corridor would not be designated.

Designating certain areas as RCAs and ACECs could restrict timber harvest, firewood gathering, and post cutting as well as OHV use, creating an economic hardship. Socially, the public could benefit through additional resource protection and multiple-use.

To protect the desert tortoise, the endangered woundfin minnow, the Virgin River chub, other native fishes of the Virgin River, and riparian habitat, certain realty and minerals actions may be limited or restricted in the Littlefield/ Beaver Dam area causing an adverse social and economic impact.

Certain areas may be designated for commercial and personal firewood and post cutting based on distance and condition of roads from communities creating a beneficial impact. Commercial cutters would incur more expense to travel to designated commercial cutting areas.

Large scale harvest of ponderosa pine would not be allowed and the potential for significant economic benefits of timber harvest lost.

Meeting special designation prescriptions could limit the sale of mineral materials from desirable locations creating a moderately negative economic impact.

Restrictions brought about by special management prescriptions could add higher costs to exploration and mining of locatable minerals.

The Virgin River Campground would permit long-term camping for winter visitors.

The Parashant RCA would provide resource protection while encouraging visitor use, creating a positive social impact. Timber harvest for commercial purposes would not be allowed on the Mt. Trumbull RCA causing a negative economic impact.

Districtwide designations for OHV use would restrict OHV enthusiasts to certain areas, causing a negative social impact.

IMPACTS TO ADJOINING LANDS

Adjoining lands addressed in this section are administered by the National Park Service, Forest Service, State of Arizona, Kaibab-Paiute Tribe and private landowners.

FROM LAND RESOURCES

Private or state land acquisitions near or adjacent to National Park Service-administered land (Lake Mead National Recreation Area, Grand Canyon National Park, Glen Canyon National Recreation Area, and Pipe Springs National Monument) and Kaibab National Forest could have a beneficial impact on these agency management programs. BLM's management would generally be more consistent and complement these agency goals and objectives. Private or state land management is often directed toward generating revenue, with little concern for non-consumptive values.

Acquisition of state land could also have a beneficial impact on State of Arizona land management programs by reducing scattered land holdings with associated management costs. Consolidated lands could increase revenue for the school system.

Private landowners may be negatively affected if they hold leases on adjoining state lands acquired by the federal government because of stricter management. A positive impact would be working with only one land management agency after the exchange.

State, Indian, and private lands located around communities such as Fredonia, Colorado City, Littlefield, and Beaver Dam are used primarily for agricultural, residential, and commercial development. As communities grow, the land needs for public purposes such as parks, schools, airports, and rights-of-way on and across public land will increase. The RMP generally provides for this need, but disposal would be subject to environmental review.

Acquired lands would be managed similarly to the adjoining BLM-administered lands. Before approval of any surface-disturbing activities on these lands an EA would be prepared, and special construction and reclamation stipulations (Appendix 5) applied.

Most land disposals (exchanges, sales, R&PP leases/ sales, etc.) would not be near or have any direct adverse

impact on adjoining National Park Service- or Forest Service-administered land. Approval of disposal actions is subject to the completion of EAs. Lands identified for disposal are primarily located near or in expanding communities like Colorado City, Fredonia, and Littlefield, Arizona.

Airport leases that are currently valid would remain in effect. The small runway in Toroweap Valley would continue to be used. It is mostly used by Grand Canyon National Park rangers to facilitate management of this remote area. The Whitmore, Cliff Dwellers, and Marble Canyon landing strips would continue to be used. Landing strip impacts would be to the naturalness and solitude of the area caused by intermittent aircraft landings.

The proposed utility corridors only affect National Park Service land in the Ferry Swale area. The corridor would be 1/2-mile-wide in this area and would complement the corridor identified in the Glen Canyon National Recreation Area plan. Applications for large utility lines would be restricted to this corridor. Smaller, individual lines would be placed underground if practical. These actions would help protect the visual integrity of the area and have a positive impact on the Glen Canyon National Recreation Area.

Increasing the width of the current Navajo-McCullough utility corridor from 2,000 feet to 1-mile-wide is not anticipated to have any significant adverse impact on the Kaibab National Forest. In the right-of-way approval process, which is subject to the completion of an EA, stipulations could be added to the permit to protect the values on the Kaibab National Forest lands.

Establishment of utility corridors would affect private and state land within the corridor. Powerlines often decrease the value of land and restrict some uses. Most of the private and state land found within the proposed corridors are used for livestock grazing. These impacts are partially mitigated by monetary compensation.

FROM MINERAL RESOURCES

Most of the land near the boundaries between BLM and other agencies is open to locatable mineral development. Exceptions are areas having mineral withdrawals, such as the Grand Canyon Game Preserve; Vermillion Cliffs Natural Area; and theKanab Creek, Mt. Logan, and Paria Canyon-Vermillion Cliffs Wilderness Areas. Approximately 40 miles of BLM land adjacent to National Park Service-administered land and 20 miles adjacent to Kaibab National Forest are closed to mineral development.

Locatable mineral development could cause indirect adverse impacts to National Park Service- and Forest Service-managed land to the extent that exploration or development occurred near these lands. Impacts are generally those resulting from upgrading or construction of large all-weather access in areas adjacent to remote backcountry areas of the park. Such access tends to temporarily change established use patterns on lands adjacent to the National Park Service land and in some cases use patterns. Land uses that could change are recreation, unauthorized woodcutting, sightseeing, and cultural or project vandalism.

Most of the impacts associated with projected mineral exploration and development are short-term and temporary. Development associated with exploration or mining must be rehabilitated when operations cease. In addition to the regulatory mandates for reclamation, the special reclamation requirements specified in Appendix 5 would apply. The temporary nature of existing mining operations and reclamation stipulations would reduce the magnitude of impact to National Park Service land.

Adverse impacts from mineral development near National Park Service land are not projected to exceed any statutory thresholds for air or water. If approaching these levels of significance, impacts would be mitigated below any adverse threshold level.

Minor short-term impacts to natural settings on National Park Service and Forest Service land may include fugitive dust from haul traffic, night lights from mine yards, and noise impacts from heavy equipment. Night lights from yard lamps can be hooded to minimize impacts to outside areas. Noise impacts generally dissipate short distances from the mine, depending on the origin of the sound, decibel levels and the topography and vegetation of the area.

Visual management will further guide or mitigate potential adverse visual impacts to adjoining lands. Approximately 22 miles of public land adjacent to National Park Service land would be managed according to VRM Class I guidelines, and 75 miles according to VRM Class II guidelines. Managing land under these guidelines would help maintain the naturalness of the area.

Exploration and development of salable minerals near or adjacent to adjoining lands are discretionary. No developments of these minerals would be allowed if they would have significant adverse long-term impacts.

There is little possibility of significant development of leasable mineral resources near or adjacent to National

Park or Forest Service land due to low resource potential. No significant adverse impacts are anticipated during the life of this plan. Further, seasonal restrictions would be added to all leases or APDs to eliminate oil and gas activity in critical periods to protect bighorn sheep and peregrine falcon during breeding seasons. Such seasonal restrictions would complement National Park Service and Forest Service management and eliminate impacts to recreational users during high use periods.

Approximately 170 miles of boundary along National Park Service lands are subject to seasonal restrictions to protect peregrine falcon and desert bighorn sheep. Additionally, there are no surface occupancy stipulations on 16 miles of land adjacent to park boundaries.

Encouraging mineral development on adjoining public lands could have beneficial economic impacts to state or private lands as exploration and development (with appropriate lease arrangements) could extend beyond public land boundaries. Applications for exploration and development of the federal mineral estate in those areas overlain by non-federal surface estate could be filed with the Bureau. Prior to BLM approval, an agreement would have to be reached between the surface owner and applicant waiving compensation for damages to surface improvements or a bond would be required to be secured by the applicant to cover the cost of damages to any surface improvements and reclamation.

Most private lands near Fredonia, Colorado City, Mount Trumbull and some scattered parcels throughout the Arizona Strip (except patented railroad lands) have minerals reserved by the federal government. Since these patents came about through the Stock Raising Homestead Act, these minerals are subject to claim under the 1872 Mining Law. This allows any qualified person to locate a mining claim for reserved minerals and prospect, providing the claimant does not injure, damage, or destroy permanent improvements and compensates the surface owner for damages to crops or for the value of the land for grazing.

FROM SPECIAL DESIGNATIONS

Over 50 percent of the BLM border with the National Park Service is included in special management designations. Designations include an ACEC, RCAs, wilderness areas, natural area and a game preserve. The purpose of these designations is to give management emphasis and resource protection to special resource values. These designations would have a positive impact on National Park Service-administered land due to the proposed, more restrictive management.

ACEC designation from lower House Rock Valley to the Navajo Bridge would help protect *Pediocactus bradyi*, an endangered species. Any activity in this area must be compatible with the goal of protecting the speciesas defined in the Endangered Species Act. RCA designations would complement the National Park Service and Forest Service management strategies in the remote backcountry settings. Beneficial impacts would result from development of a coordinated activity plan, efforts to acquire all private and state lands in the area and to restrict land disposal. Proposed rights-of-way would be screened or placed underground where feasible; surface disturbance would be subject to special reclamation stipulations identified in Appendix 5; recreation use and opportunities would remain dispersed and unregulated; and minimum signing for public safety and recreation purposes would be allowed. These efforts would complement adjoining land management by reducing visual impacts associated with developments and maintaining the relatively remote character of the RCA.

Designation of the Canyons and Plateaus of the Paria as an RCA would affect approximately 18 miles of boundary between the Kaibab National Forest and the BLM. This should have a beneficial impact to Forest Service management. Beneficial management prescriptions include acquisition of private and state inholdings; bans on salable mineral development; increased emphasis on cultural resource monitoring plans and inventory; increased signing for interpretation and safety needs for recreational users; management direction for grazing activities would be to maintain the area in good-to-excellent ecological condition; all access not designated as open would be closed; and the area would be managed under VRM Class II guidelines for protection of visual resources.

Some state lands within ACECs and RCAs are proposed for exchange. If these lands are not acquired, slight negative impacts could occur to state land management due to more restrictive management prescriptions on public lands.

Special designations and stipulations established by this resource management plan would place greater restrictions on public land surface-disturbing activities. In addition, stipulations protecting plants and animals that are listed under the Endangered Species Act would further restrict activities that could harm or otherwise jeopardize the species involved. These constraints would require more time and expenditures to analyze proposals and approve applications. These restrictions could place greater local government emphasis on utilizing private land to meet community growth and public demands.

FROM CULTURAL RESOURCE MANAGEMENT

Enhanced cultural resource management objectives under the RMP should have a positive impact on adjoining land managing agencies; beneficial impacts would result from the designation of cultural properties for public use in areas adjacent or near other public land. Such cultural properties, with their viewing opportunities, would complement and enhance visitor experiences in the area and expand public understanding of cultural values. Further, activities would be restricted in these areas if they are not compatible with the special cultural designations.

FROM SPECIAL STATUS SPECIES

Land ownership adjustments that could affect endangered species such as the desert tortoise or their habitats would be subject to FWS consultation and mitigation. Mitigation could have a negative impact to state or private lands where the private owner or state is pursuing an exchange. Community expansion needs in the Beaver Dam/Littlefield area may go unmet due to conflicts with desert tortoise habitat protection.

FROM WATERSHED MANAGEMENT

Enhanced management attention to critical and sensitive watershed areas would cause minor beneficial impacts to adjoining landowners, particularly if their lands are located downstream in the watershed. Reduced sediment loading and runoff to the Colorado River and associated drainages could be a positive impact on National Park Service resource values.

Acquisition of water rights on springs and instream flows could adversely affect development on private, state and Indian land because the water filed upon would not be available for their uses.

Unfenced intermingled private and state land conditions would benefit from the proposed watershed management program which is designed to improve and protect the soil, water and air, resources.

FROM RIPARIAN MANAGEMENT

Continued management focus on the riparian areas in Paria Canyon and Kanab Creek would complement and enhance visitor experiences in the wilderness areas and adjacent National Park Service and Forest Service land. Increased management attention would ensure that current riparian values are not degraded by present grazing practices and recreation use.

Values on private and state lands along the Virgin River would be protected by designating the Virgin River Corridor as an ACEC and management prescriptions that protect the existing natural conditions.

FROM WOODLAND/FOREST MANAGEMENT

Woodland harvest (commercial and private) would be restricted in areas being managed as VRM Class II unless other resource values would be enhanced. No harvest is allowed in VRM Class I areas (wilderness). These restrictions apply to approximately 100 miles along the National Park Service boundary and 65 miles of Forest Service boundary, helping maintain the natural resource values of these areas.

Ponderosa areas would be managed to complement other resource values such as wildlife, watershed, and recreation and have a beneficial impact on adjoining National Park Service land. Management attention would focus on maintaining a healthy, diverse ponderosa ecosystem. Limited commercial use may be appropriate only if it benefits the health of the forest or other uses. Before any trees are cut or removed, an EA would be completed with full public involvement. No significant visual impacts nor negative impacts would occur on adjoining lands.

Fire may be used to enhance the health of the forest and to reduce potentially catastrophic fuel loads. Burns would be planned to minimize the effect of smoke on sensitive Class I airsheds on Grand Canyon National Park. However, burning could still have a negative impact on visual resources within the park. Wildfires spreading from public lands to adjoining lands could also have a negative impact due to smoke and loss of resources. Small controlled burns would help minimize these impacts by reducing fuel buildup.

Intermingled tracts of state and private lands in the Mt. Logan ponderosa forest could have both positive and negative impacts if they are managed the same as the public lands, i.e., by maintaining a healthy diverse ponderosa ecosystem. The objective to manage for the benefit of other resources could improve the aesthetic recreation and wildlife values of an area, but negatively affect private and state landowners by foregoing potential economic benefits from timber sales.

FROM GRAZING MANAGEMENT

Changes in the grazing management program would result from the rangeland monitoring studies and evaluation. The Parashant allotment would be used periodically to allow rest on other allotments affected by wildfires or to implement AMPs. Positive impacts to the district range program would occur and may possibly impact adjoining public, private, Indian, and state lands.

FROM WILDLIFE MANAGEMENT

The Bureau's wildlife management program is designed to improve and maintain wildlife habitat through implementation of the six existing HMPs. Visitor viewing opportunities for wildlife, particularly bighorn sheep and antelope, should increase as numbers grow and they continue to move into their historical habitats. Wildlife introductions would be coordinated with adjoining state and federal land managing agencies and private landowners to ensure no negative impacts.

Surface-disturbing activities resulting from the wildlife program would be subject to special reclamation stipulations identified in Appendix 5. These stipulations are designed to eliminate or reduce adverse impacts associated with developments so visual impacts should be minimal.

FROM RECREATION RESOURCES

Proposed recreation management objectives for maintaining naturalness and remoteness and to have extensive recreation use would complement adjoining landmanagment agencies. No new developed campgrounds are proposed which should complement National Park Service and Forest Service objectives for the adjoining lands.

OHVs would be managed to reduce cross-country travel in all areas adjoining National Park Service and Forest Service land. For about 80 miles the land along National Park Service boundary is closed to OHV use, limited to designated roads and trails for 83 miles, and for 34 miles it is limited to existing roads and trails. For land adjoining the National Forest, approximately 13 miles are closed, 43 miles limited to designated roads and trails, and 52 miles limited to existing roads and trails. Detailed OHV plans would be fully coordinated with affected landmanaging agencies and private landowners to minimize conflicts.

FROM VISUAL RESOURCE MANAGEMENT

VRM guidelines give direction on how to reclaim areas and the type of activities that are compatible with an area's visual resources. Over 190 miles of the land adjacent to National Park Service land would be managed according to Class I or II guidelines. These areas would be managed to preserve the natural scenery, complementing their goals and objectives. Land along the remaining 30 miles of National Park Service boundary would be managed according to VRM Class III and IV guidelines. In these areas visual intrusions could occur that would not be compatible with National Park Service goals and objectives.

FROM TRANSPORTATION/ACCESS

Closing roads where no public or administrative need exist would have a beneficial impact on adjoining landowners because it would complement their management objectives. In determining the need for a road, adjoining landowners would be consulted and their desires reflected in the access decision.

CONCLUSIONS

The proposed RMP decisions would have a beneficial impact on adjoining National Park Service and Forest Service management programs. Even though BLM's management goals and mandates are different from those of the National Park Service, land use compatibility along their boundaries would be partially achieved through many of the RMP decisions. The BLM and Forest Service management goals and mandates are similar, so few conflicts exist. Private, state, and Indian land would not be significantly affected.

One of the primary objectives of the RMP is to maintain the remoteness of the Arizona Strip and still manage for multiple use. This goal and the associated decisions complement the management of the National Park Service along BLM's boundary. Decisions that help implement this goal include acquisition of state and private inholdings where feasible, special reclamation stipulations to restore disturbed areas to a near natural condition,and OHV restrictions. In addition, the Bureau would manage ponderosa pine for the enhancement of other uses. Extensive recreation mangement would include managing lands along the inter-agency boundary under VRM Class I and II guidelines, eliminating roads not

needed for public access or resource management, and establishing special management designations. Overall impacts to private and state lands would be minor and mostly beneficial.

CUMULATIVE IMPACTS

This section addresses the degree and extent of the cumulative impacts on the physical, biological, and socio-economic environment. Cumulative impacts include the impact to the environment which results from the incremental changes from various actions when added topast, present, and reasonably foreseeable changes. Cumulative impacts can also result from individually minor, but collectively significant actions taking place over a period of time.

REASONABLY FORESEEABLE IMPACTS (1990-2005)

Reasonably foreseeable impacts are those impacts that could occur over the 15-year plan life. Table III-31 describes the cumulative surface disturbance changes from 1976-1989 and represent the baseline condition existing within the district. Reasonably foreseeable impacts from the proposed plan are added to the changes described in Chapter III (cumulative change). To facilitate this analysis, all environmental factors are grouped into four categories; physical (surface disturbance), biological, remote (recreation settings and experience opportunities), and socio-economic.

PHYSICAL COMPONENT

Overall, a total of 63,665 acres could undergo some degree of surface impact. The majority (91 percent) of surface disturbance would involve land treatments designed to enhance watershed, wildlife and range conditions, and harvest of woodland products and would only cause short-term temporary changes to the surface. Five percent (3,080 acres) of the surface change could result in a permanent commitment of resources. These impacts would be due to land developments and agriculture following transfer to private ownership, roads, rangeland improvements, utilities, rights-of-way, leases, recreation facilities, and grants.

Most of the surface impacts would be caused by vegetation type conversion and reseeding to improve watershed condition, wildlife habitat, rangeland condition, and livestock forage. These impacts would be short-term involving initial disturbance from vehicles, chains, plows, etc. used in land treatments or the harvesting of woodland products. Of the 59,050 acres of surface impacts from these activities, only 320 acres of roads and structural developments would be considered permanent.

Management of the lands and minerals programs could result in an estimated 4,500 acres of surface impact. Approximately 2,650 acres are considered long-term and permanent impacts resulting from lands actions (land developments and agriculture following transfer to private ownership, and rights-of-way and leases). Other significant actions in the lands program could include (1) acquisition of 161,800 acres of State of Arizona land through exchange; (2) establishment of a right-of-way planning corridor along the existing Navajo-McCullough 500 kV powerline and via the Lime Kiln/Rosy Canyon route; (3) transfer of 7,405 acres to private ownership by sale or exchange and transfer of 17,783 acres to private ownership through exchange only; (4) processing of land use authorizations for rights-of-way, leases, permits, etc., communications sites, and Recreation and Public Purposes Act applications from governmental or non-profit entities for public parks and other public purposes; (5) designating a communication site on Seegmiller Mountain; (6) making lands available for the Colorado City airport and continuing to work with the City of Page to consider and evaluate possible airport sites to meet future community needs, and acquisition of subsurface estate where BLM manages the surface. Changes to the physical environment from the programs would be minor with the exception of the non-designation of right-of-way corridors through desert tortoise habitat. While impacts to desert tortoise could be positive, impacts to visual and socio-economic resources could be adverse.

Approximately 3 percent of the total estimated surface impacts (1,850 acres) could be generated from locatable, leasable, and salable mineral activities. Appendix 28 describes the assumptions used to project the 1,355 acres of surface impacts related to locatable minerals. The vast majority would be short-term impacts associated with drill site exploration and temporary overland access. Longer-term but temporary impacts are those associated with development of deposits and necessary ancillary facilities. Haul roads and utilities used in conjunction with more than one development could last considerably longer than ten years, however, mandatory mitigation would include reclamation of nearly all surface disturbances associated with mineral development. Exploration is not anticipated to have significant adverse impacts to surface water. Mining activities could cause minor adverse impacts to surface water, and perched aquifers could be dewatered as a result of mining activities. Monitoring would ensure that mining

activities do not adversely affect Kanab Creek or the Colorado River. No significant impacts have occurred to date. Exploration activities would cause minor impacts to air quality. These impacts are caused mostly by vehicle travel which generates fugitive dust. Air and radiological impacts are being monitored at existing mine locations. To date, none of the studies have demonstrated any statutory thresholds for air quality have been surpassed and therefore no significant impacts are anticipated. Adverse noise impacts from exploration and mining activities would be localized and temporary.

ACEC designations, OHV closed areas, and no-surface occupancy and seasonal restrictions on leasable minerals could have negative effects on mineral resource development depending on the location and timing of proposed activities. ACEC designations and proposed management prescriptions do not preclude locatable or leasable mineral development, but require the filing and approval of a plan of operations for any exploration or development exceeding casual use or involving the use of a motorized vehicle in a closed area. ACECs would be closed to mineral material disposals. Leasable mineral (oil and gas) activities could be adversely affected by no-surface occupancy restrictions designed to protect visual resources, as well as seasonal restrictions for the protection of bighorn sheep and peregrine falcon.

Beneficial impacts would occur from long-term protection of cultural resources from ACECs, special management areas, OHV, and woodcutting areas.

BIOLOGICAL COMPONENT

Actions under the existing MFPs for development and implementation of wildlife habitat, watershed, and livestock grazing management plans would continue (Table II-1). The plans are designed to reach objectives specific to the plan area and involve rangeland improvements for wildlife habitat, watershed, and livestock grazing and management actions to maintain or improve rangeland conditions.

The harvest of woodland products on 21,780 acres (34 percent of the total surface impacts) would create temporary surface changes, mostly in the form of overland vehicle travel and removal of selected overstory trees. This disturbs vegetation and temporarily displaces wildlife. Where woodland harvest activities are concentrated in specific areas, impacts are similar to land treatments where overstory is removed, allowing for a more productive understory. Negative impacts to wildlife species have occurred in areas where small roads were created to facilitate harvesting woodland products.

Locatable, leasable, and salable minerals account for temporary impacts to vegetation and wildlife on about 1,850 acres (3 percent of the total surface impacts). Wildlife may be displaced near exploration and development sites generally for the duration of operations. Vegetation would be temporarily removed from mineral development sites and access routes, representing direct habitat loss to wildlife species. Mandatory mitigation would be required to ensure that all surface disturbance would be reclaimed to reflect prevailing environmental conditions and to ensure long-term productivity.

Planned management of ponderosa pine areas would have both short-term adverse, and long-term beneficial impacts on visual resources and recreation values. Beneficial impacts to wildlife would occur through maintenance and improvement of habitat. Adverse impacts result from removal of trees by thinning, but this would be substantially out-weighed by the long-term benefits thinning would create. Thinning operations reduce overcrowding in areas with thick younger stands, allow other trees to be more vigorous and removes trees which harbor insects or diseases that can harm or kill other ponderosa pine in the forest community. Planned fire suppression would protect the forest ecosystem from being destroyed by fires caused by visitors or lightning. Prescribed burning would damage or kill some vegetation, including trees, but would have an overall beneficial long-term impact on the forest ecosystem.

Beneficial impacts to special status species would occur from the ACEC and OHV designations and seasonal lease stipulations for oil and gas. Special status species that would benefit include Siler and Brady pincushion cactus, woundfin minnow, Virgin River roundtail chub, desert tortoise, and peregrine falcon. Riparian vegetation would benefit from the Virgin River ACEC, land acquisitions, and OHV designations.

Impacts which could cause a long-term decrease in biological diversity include lands program actions (developments and agriculture following transfer to private ownership, and rights-of-way and leases), permanent rangeland improvements, recreation facilities, and BLM transportation system upgrades which eliminate vegetation, wildlife or their interactions. Approximately 5 percent of the total impacts (3,080 acres) would be considered to be a permanent commitment of resources. Wildlife and vegetation would receive moderate, negative, and both temporary and permanent impacts. Activities associated with the lands program could affect about 2,650 acres of wildlife habitat and vegetation in order to facilitate growth and expansion of local communities or to provide for other services.

REMOTENESS COMPONENT

The designation of ACECs, establishment of RCAs, designation of areas closed to OHV and limited to designated roads and trails, and the interim management of two potential wild and scenic rivers would contribute beneficial impacts to remoteness and recreation management in the district.

Current management quality of the watershed, grazing, wildlife, and woodland products programs would continue to bring about the greatest change to recreation. Impacts to physical settings created by land treatments, facility development, and associated roads would continue to shift recreation classes from the primitive end of the recreation opportunity spectrum toward the urban end and slowly decrease the remote acreage within the district. However, the change over time would be less noticeable as vegetation diversity and succession occurred within treated areas.

Mineral exploration and development would affect physical settings with new and upgraded roads and development sites. These activities would generally affect recreation opportunities in semi-primitive, nonmotorized and motorized classes by shifting settings toward the urban end of the recreation spectrum. However, these activities would be considered short-term, temporary impacts due to mitigation, which would include almost total rehabilitation of access roads, mine yards, and powerlines. The greatest impacts to remoteness from mineral exploration and development could come in the form of temporary changes to the social setting from construction of new and upgraded roads. Improved access (until rehabilitated) could encourage the public to enter areas they previously avoided due to poor road conditions. Greater numbers of visitors in an area would then shift the social setting toward the urban end of the spectrum.

Visual resources would have long-term beneficial impacts from the Virgin River ACEC by ensuring maintenance of scenic qualities. No-surface-occupancy lease stipulations would have long-term benefits for visual resources. Long-term adverse impacts could occur in some areas from the R/W corridor.

The gradual increase in the region's population, their leisure time, and improved recreational vehicles would continue to affect remoteness. The more visitors to the district the less likely the opportunity to experience remoteness. OHV activities would be adversely affected by closures and limitations to designated roads and trails if new areas are designated as ACECs.

Generally, managing the remoteness quality would moderately change the current management approach to one focused on experience opportunities and settings. Thus, for the long-term, such management could be more responsive to changing visitor needs and more custodial of the settings in which those needs are met.

SOCIO-ECONOMIC COMPONENT

Population:

Under the proposed plan, about 7,405 acres of land could be available for exchange, sale, or R&PP lease/sale and an additional 17,783 acres could be available for exchange or R&PP lease/sale. It is not expected that all of the identified lands would be transferred out of federal stewardship as exchange would be first choice. The acreage identified for this purpose would accommodate a wide range of uses and foster good community planning. All lands identified for this purpose are located in the near vicinity of existing communities.

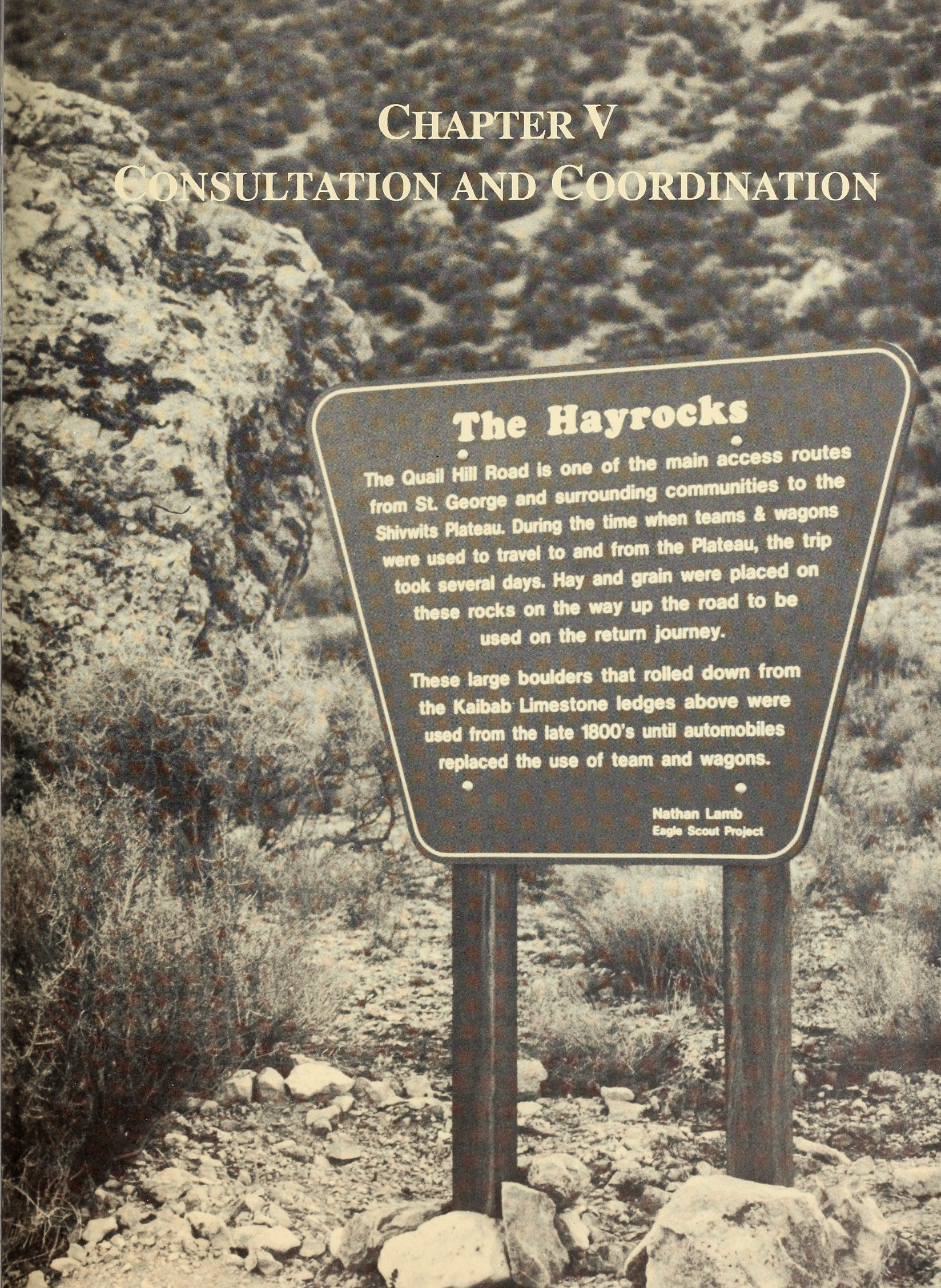
Income:

Under the proposed plan, direct impacts to income types or per capita income within the local communities are not expected. A small amount of new revenue may be generated in the service sector related to tourism as a result of the RCA designations. These impacts are not expected to be significant, however, as most of the tourism is expected to remain with Grand Canyon and Lake Powell.

Social Perceptions:

Management under the proposed plan would be more restrictive than under current management. Under the proposed plan, special management areas would be established and management prescriptions would benefit the preservation of natural values and remoteness. Depending upon the particular use, implementation of the proposed plan would be seen as either adverse or beneficial to the user or user group. In general, most people feel that the remoteness character of the district should be maintained. However, many local users feel no broad restrictions are needed to protect the identified resources within the ACECs or feeling of remoteness or naturalness. Other groups and individuals perceive that threats to the identified resources are greater and that a greater level of control or restriction would be needed in order to protect these resources.

CHAPTER V
CONSULTATION AND COORDINATION



CHAPTER V
CONSULTATION AND COORDINATION

INTRODUCTION

The Arizona Strip District resource management plan/environmental impact statement (RMP/EIS) was prepared by specialists from the Arizona Strip District Office, Shivwits and Vermillion resource areas. The Arizona State Office planning staff and resource specialists provided technical reviews and suggestions. Development of this RMP/EIS began in 1988.

LIST OF PREPARERS

Ilene R. Anderson, Realty Specialist
A.S. Dixie College and is a graduate of the BLM lands school in Phoenix, Arizona. Ilene has 16 years experience with BLM.

Julian Anderson, Environmental Specialist
B.S. Range Management, Utah State University. Julian is one of the principal writers and a member of the core team. He has 26 years with BLM.

Linda Barwick, File Clerk
Linda was one of the typists for the RMP. She has 18 years with BLM.

Kenneth Beckstrom, Supervisory Range Conservationist
A.S. Dixie College; B.S. Range Management, Utah State University. Ken assisted in data preparation and review. He has 20 years with BLM.

John Branch, Geologist
B.S. Geology, Utah State University. John has 8 years with BLM. John is a member of the core team and is one of the principal writers.

Dennis Curtis, RMP Team Leader
B.A. and M.S. Geography, minor in Economics, University of Utah. Dennis is the Team Leader for the RMP and has assisted in preparation of several sections. He has 22 years with BLM.

Robert Davis, Natural Resource Specialist
B.S. Forest Management, University of West Virginia. Bob has 25 years with BLM.

Timothy A. Duck, Wildlife Management Biologist
B.A. Ecology and Evolutionary Biology, University of Arizona. Tim assisted the Automated Data Processing team that produced the maps for the RMP. He also assisted in the development of the tortoise narratives. Tim has 10 years with BLM.

Stephanie Ellingham, Natural Resource Specialist
B.S. Zoology, Northern Arizona University. Stephanie has 10 years with BLM.

Thomas Folks, Outdoor Recreation Planner
B.S. Recreation Park Planning and Resource Management, University of Utah. Tom is a member of the core team and is one of the principal writers. He has 14 years of federal service.

Toni Gardner, Secretary
Toni is the principal typist for both the draft and final. She has 10 years with BLM.

Larry Gearhart, Outdoor Recreation Planner
B.S. Natural Resource Management, Humboldt State College. Larry assisted in data preparation and review. He has 22 years of federal service including 11 years with BLM.

Carl Gossard, Fire Management Officer
B.S. Natural Resource Management, Arizona State University. Carl has 10 years with BLM.

Eddie Guerrero, Wildlife Management Biologist
B.S. Wildlife Management, New Mexico State University. Eddie has 8 years with BLM.

Michael Herder, Wildlife Management Biologist
B.S. Wildlife Management, B.A. Zoology, M.S. Marine Biology, all from Humboldt State University. Michael served as writer / editor and is a member of the core team. He used desktop publishing to produce the RMP and graphics to camera-ready form. Michael has 3 years with BLM.

Lee Hughes, Range Conservationist
A.S. Forestry, North Dakota State University; B.S. Range and Fishery Management, Utah State University. Lee is one of the principal writers and a member of the core team. He has 16 years with BLM.

Melvin Jackson, Supervisory Civil Engineer
B.S. Civil Engineering, Arizona State University. Mel has 15 years of federal service including 8 years with BLM.

Aline LaForge, Archaeologist
B.S. Geography, a minor in Anthropology, Southern Oregon State University. Aline has 5 years with BLM.

Richard Malcomson, Archaeologist
B.S. and M.A. Anthropology, University of New Mexico. Rick has 13 years with BLM.

Kenneth Moore, Planning & Environmental Coordinator
B.S. Forest and Recreation Management, Utah State University. Ken is the Technical Coordinator and one of the writers with the core team. He has 22 years with BLM.

Ronald Ray, Computer Systems Analyst
A.A. Biology and Math, Mesa Community College; B.S. Environmental Science, Utah State University. Ron is in charge of the Automated Resource Data system that produces maps, graphics, and other products. He has 13 years with BLM.

Holly Roberts, Surface Protection Specialist
B.S. Fisheries Science and Wildlife Management, University of New Mexico; A.S. Botany and Range Management from NMU; A.S. Organic Chemistry, New York University. Holly is one of our principal writers and assisted in preparation of several sections. Holly has 11 years with BLM.

Ken Shurtz, Cartographer
B.S. Physical Science/Geology, minor in Computer Science from Southern Utah State College. Ken is a member of the Automated Data Processing team that digitized, manipulated, and produced the maps and other ADP products that went into the RMP. He has 6 years federal service.

Michael Small, Wildlife Management Biologist
B.S. Wildlife Management, M.S. Range Science, Texas Tech University. Mike has 14 years with BLM.

Robert Smith, Natural Resource Specialist
B.S. Plant, Soils, and Hydrology, University of Nevada; post graduate work in Soils and Hydrology, University of Nevada. Three years with Soil Conservation Service, 11 years with BLM.

L. D. Walker, Range Conservationist
B.S. Zoology, Southern Utah State College. A minor in Range, University of Wyoming. L. D. has 14 years of federal service, 1 year with the Fish and Wildlife Service and 13 years with BLM.

Elved Williams, Realty Specialist
B.S. Animal Husbandry, minor in Economics, Utah State University. Elved has 24 years with BLM.

ARIZONA STRIP DISTRICT AND STATE OFFICE ASSISTANCE

The following personnel from the Arizona Strip District Office provided technical assistance and review for this RMP/EIS:

G. William Lamb, Arizona Strip District Manager
Raymond D. Mapston, Associate District Manager
George W. Cropper, Shivwits Area Manager
Robert D. Roudabush, Vermillion Area Manager
Brent Jensen, Assistant District Manager for Resources
Ferron L. Leavitt, Assistant District Manager for Operations

The following people from the Arizona State Office provided technical assistance and review for this RMP/EIS:

D. Dean Bibles, Arizona State Director
Lynn H. Engdahl, Associate State Director
Larry P. Bauer, Deputy State Director, Mineral Resources
Beaumont C. McClure, Deputy State Director, Lands and Renewable Resources
Robert E. Archibald, Jr., Realty Specialist
Eugene Dahlem, Wildlife Management Biologist
Daniel J. McGlothlin, Hydrologist
Keith L. Pearson, Planning and Environmental Coordinator
Alan S. Rabinoff, Geologist
George W. Ramey, Jr., Range Conservationist
Gary D. Stumpf, Archaeologist
Larry D. Taddia, Supervisory Cartographic Technician
Bruce B. Talbot, Outdoor Recreation Planner
Marvin E. Weiss, Natural Resource Specialist

SCOPING (ISSUE IDENTIFICATION)

Scoping served to identify the significant issues to be analyzed in the RMP/EIS and deemphasized or eliminated from detailed study insignificant issues or issues addressed in earlier environmental reviews. The significant environmental issues were then incorporated into a range of alternatives, and the effects or impacts of implementing the alternatives were analyzed in this RMP/EIS.

The BLM held numerous public scoping meetings to help identify public concerns about issues. Shown at each of these meetings was a 14-minute video tape about the district and its upcoming RMP. Based on these meetings and a district interdisciplinary team, the issues were finalized.

The scoping process for the RMP/EIS area involved several phases, extending from July 1987 to April 1988.

PUBLIC INVOLVEMENT AND CONSULTATION DURING DEVELOPMENT OF THE DRAFT RMP/EIS

July 1987 - Federal Register notice announcing the beginning of the Arizona Strip RMP/EIS and inviting public participation on issue identification.

October 1987 - First edition of the Arizona Strip Advisory was sent out to over 500 interested individuals and groups explaining the RMP/EIS process, and asking for input on planning issues.

Public meetings were also held with conservation groups in St. George, Utah and Phoenix, Arizona to solicit comments on planning issues.

November 1987 - A public meeting was held in Flagstaff, Arizona with conservation group representatives.

Other public meetings were held in St. George, Page, Flagstaff, Phoenix, and Fredonia. The purpose of these meetings was to solicit comments on planning issues.

A meeting was also held with the North Kaibab Ranger District, Forest Service, in Fredonia to discuss issues.

December 1987 - Meetings were held with the Mohave County Board of Supervisors and Region III of the Arizona Game and Fish Department in Kingman, Lake Mead National Recreation Area of the National Park Service, Boulder, Nevada; Glen Canyon National Recreation Area of the National Park Service in Page and Grand Canyon National Park at Grand Canyon, Arizona to discuss issues.

A mineral scoping meeting was held in St. George to discuss issues.

January 1988 - A public meeting was held at Marble Canyon, Arizona, to solicit comments on planning issues.

Meetings were held with the District Grazing Advisory Board and the Advisory Council.

March 1988 - The second RMP Advisory was issued to more than 500 interested individuals and groups. This issue summarized the results of the public scoping meetings and revised planning issues.

July 1988 - The third RMP Advisory was issued to more than 500 interested individuals and groups. This issue brought the public up to date on new developments such as land exchanges and ACEC.

October 1988 - The District Grazing Advisory Board was brought up-to-date on the RMP.

November 1988 - A meeting was held in St. George with the District Advisory Council.

December 1988 - A fourth RMP Advisory was issued to those on the district's mailing list. In addition to updating every one on our progress, it also discussed ACECs. It also listed dates, times and places of additional public meetings.

January 1988 - Public meetings were held in Page, Marble Canyon, Littlefield, Flagstaff, Phoenix, Fredonia, Colorado City, and St. George. All these meetings were intended to update the public and discuss issues, area objectives, alternatives and special designations such as ACECs. Additional meetings were also held with the Kaibab Forest, Glen Canyon National Recreation Area, Lake Mead National Recreation Area, Mohave County and Kanab BLM.

March 1989 - Additional meetings were held with the Kaibab-Paiute tribal officials and Las Vegas BLM.

June 1989 - A meeting was held with the Grand Canyon National Park.

Meetings were also held with the District Advisory Council and the Grazing Advisory Board.

LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THIS STATEMENT WILL BE SENT

The BLM is requesting comments on the draft RMP/EIS from all interested individuals, interest groups, federal and state agencies. Because of the size of the mailing list (700), only a partial list of those who will receive the document follows.

FEDERAL AGENCIES

Advisory Council on Historic Preservation
Department of Agriculture
- Agricultural Research Service
- Forest Service
- Soil Conservation Service

Department of Defense
- Air Force

Department of the Interior
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Mines
- Bureau of Reclamation
- Department of Energy
- Fish and Wildlife Service
- Geological Survey
- National Park Service

ARIZONA STATE AGENCIES

Arizona Department of Mines
Arizona Department of Transportation
Arizona Game and Fish Department
Arizona Office of Economic Planning and Development
Arizona Oil and Gas Commission
Arizona Public Service
Arizona State Clearing House
Arizona State Land Commission
Arizona State Land Department
Arizona State Planning Department
Arizona State Historic Preservation Office

LOCAL AGENCIES

Arizona Association of County Governments
Arizona Strip District Advisory Board
Arizona Strip District Multiple Use Council
City of Kanab
City of Page
City of Mesquite
Coconino County Board of Supervisors
Five County Association of Governments
Littlefield-Hurricane National Resource Conservation District
Mohave County Board of Supervisors
Mohave County Planning
San Juan County Commission
Washington County Commission

NATIVE AMERICAN SOVEREIGNTY

Hopi Tribe
Kaibab-Paiute Tribe
Navajo Nation

INTEREST GROUPS

American Mustang Association
Arizona Desert Bighorn Sheep Society
Arizona Miners and Prospectors Association
Arizona Nature Conservancy
Arizona Riparian Council
Arizona Wildlife Federation
Canyon Under Siege
Defenders of Wildlife
Desert Tortoise Council
Friends of the River
Grand Canyon Trust
National Wildlife Federation
Northern Arizona Audubon Society
Sierra Club
Southern Utah Wilderness Alliance
Southwest Mineral Exploration
Southwest Resource Council
Wildlife Society
The Wilderness Society

ELECTED REPRESENTATIVES

Federal
- Senator Dennis DeConcini
- Senator Orrin Hatch
- Senator John McCain

Congressman Morris Udall
Congressman James T. Hansen
Congressman Bob Stump

State

Governor of Arizona, Hon. Rose Mofford
Senator Arthur Hubbard, Sr.
Representative Benjamin Hanley

PUBLIC COMMENTS ON THE DRAFT RMP/EIS

Over 400 different letters were submitted to BLM for consideration in preparation of the proposed RMP. All letters have been reproduced in this chapter; a form letter and several petitions were only reproduced once with names of all individuals included. Even though we would like to respond to all public comment letters, we have specifically responded only to the substantive comments in order to save space and minimize the size of this document. Some general responses are included.

The results of public comments on the draft RMP/EIS are separated into four sections: (1) BLM's response to general public concerns, (2) BLM's general response to public comments addressing the same issue or question, (3) reproduced public comment letters and BLM's specific responses to comments not addressed in the previous sections, and (4) Fish and Wildlife Service, Section 7 Consultation.

RESPONSE TO GENERAL PUBLIC CONCERNS

MULTIPLE USE

Several comments expressed concern that the draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies.

The planning effort focused on resolving major issues identified during scoping meetings as outlined in Chapter V of the document. Six issues were identified during the scoping process and include (1) land tenure adjustments, (2) recreation management, (3) mineral resource management, (4) access to public lands, (5) cultural resource management, and (6) areas of critical environmental concern and other areas requiring special management.

Since the RMP/EIS is issue-driven, it may appear to emphasize some issues over others. Valid existing management of all other programs which were not considered as issues during scoping was brought forth in the RMP as outlined in Appendix 32 of the draft RMP. Chapter II (pages II-1 to II-2) provides the districtwide objective of the RMP which recognizes the importance of a full range of multiple use values and the need for conservation. However, public lands do not have the same values and resources evenly distributed. Multiple use does not mean that every acre must have all the various uses present. Some lands have unique values that must be recognized and may require special stipulations to protect them. The proposed RMP does not close any new areas to multiple use. It may stipulate how and when use would be made and what reclamation (Appendix 5) would be required to restore the area.

WILDERNESS

Even though Chapter I (page I-1) states that the wilderness issue would not be addressed, several general comments questioned why the draft RMP was proposing additional wilderness areas.

The wilderness issue was thoroughly considered by the wilderness coalition and by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). Congress intended that lands unsuitable for wilderness designation be returned to multiple use management. The draft RMP does not propose additional wilderness designation. Special management areas were proposed in the draft RMP in recognition of unique/special values and the need for coordinated and intensive management. ACECs, RCAs, and SRMAs (see glossary for definitions) do not preclude other valid uses (Table II-2 outlines the management prescriptions for special management areas).

REMOTENESS

One of the districtwide objectives was to "maintain the open space, scenic character and remoteness of public lands." Several comments interpreted that management for remoteness was the same as making wilderness areas and that the nature of the Arizona Strip District is, and will remain, remote due to poor roads, limited water, rugged terrain, etc.

Most people agree that the public lands on the Arizona Strip are special. Some are more special than others due to appearance, location or values. We agree that the Arizona Strip District is remote now and

by its very nature will tend to remain remote. The objective to maintain the open space, scenic character and remoteness does not preclude activities, but ensures that they are conducted in such a manner that impacts are minimized and would be reclaimed to near natural conditions.

For example, while there may be impacts to wildlife, natural beauty, and recreational opportunities associated with mineral exploration and development presently occurring on the Arizona Strip, our environmental analyses have shown that they are minor. They are also temporary since surface impacts from mineral operations must be reclaimed as soon as practicable.

The three Hack Canyon mines, developed from two surface facilities were closed and fully reclaimed in 1988. This reclamation has been recognized by several environmental organizations as a significant model of just how well mining sites can be restored to natural conditions. Based on our experience during the past decade, existing policy and procedures are adequate for allowing mineral activities while protecting other important resource values.

GENERAL RESPONSE TO PUBLIC COMMENTS

ACEC DESIGNATIONS

Potential ACECs were evaluated during the planning process. A summary of this evaluation is found in Appendix 6. ACECs must meet relevance and importance criteria as outlined in 43 CFR 1610.7-2 before they can be considered for designation. The following are general responses to comments on specific ACEC nominations.

Marble Canyon ACEC

The additional 4,800 acres identified for the Marble Canyon ACEC in Alternative 3 were for Fickeisen pincushion cactus, a Category I special status species. Studies are showing a greater abundance than earlier known and inclusion in an ACEC is not warranted. The 10,700 acres planned for the Marble Canyon ACEC is adequate for the listed Brady pincushion cactus.

Fort Pierce ACEC

The primary reason for designating the Fort Pierce ACEC was to protect the endangered Siler pincushion cactus. The natural occurrence of saline soils is widespread on the Arizona Strip District as noted on Map III-11 of the RMP and by itself would not meet the relevance and importance criteria as outlined in 43 CFR 1610.7-2. ACEC designations highlight areas where special management attention is needed to protect, and prevent irreparable damage to important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. The ACEC designation indicates to the public that the BLM recognizes that an area has significant values and has established special management measures to protect those values. In addition, designation also serves as a reminder that significant values or resources exist which must be accommodated when future management actions and land use proposals are considered near or within an ACEC. Increasing the size of the Fort Pierce ACEC would place unnecessary restrictions on other multiple use considerations in the buffer area and cause duplications of protection measures. The majority of lands classified as having slightly saline soils would have off-highway vehicles (OHVs) limited to designated roads and trails or to existing roads and trails.

Kanab Creek

Kanab Creek was thoroughly considered by the wilderness coalition and by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). According to the House Report on the Arizona Wilderness Act, Kanab Creek and its adjacent lands presented one of the toughest challenges to the various groups and individuals which negotiated the Arizona Strip wilderness proposals. Congress designated 77,100 acres as the Kanab Creek Wilderness then stated that lands "not designated as wilderness by this Act have been adequately studied for wilderness designation." It was the intent of Congress that lands unsuitable for wilderness designation be returned to multiple use management. In the period leading to the 1984 Wilderness Act, representatives of many organizations participated in the "good faith" understanding that lands in the Arizona Strip released by the Act would be returned to multiple use management and not placed in a protective status.

Kanab Creek drainage is under the administration of three different agencies with different regulations and mandates. From where Kanab Creek forms a major canyon to where it meets the Colorado River, 80 percent of the stream channel is either wilderness or national park and, with our proposed plan to close Grama Canyon and Kanab Creek (north of Snake Gulch), 100 percent of the Kanab Creek channel has some form of protective management. The remainder

of Hacks Canyon that is not designated as wilderness limits OHV to designated roads and trails. We agree that the scenery, remoteness, and naturalness of the Kanab Creek drainage that has been designated as wilderness or that is within the Grand Canyon National Park are unique.

Our proposed plan is to close Grama Canyon and Kanab Creek (north of Snake Gulch) and limit OHV use to designated roads and trails in the remainder of Hacks Canyon that is not designated as wilderness.

The remainder of Kanab Creek outside of the Grand Canyon National Park boundary and not designated as wilderness does not meet the relevance and importance criteria for an ACEC. The text in Appendix 6 has been modified.

Andrus, Dansil and Parashant Canyons

We have examined Andrus, Dansil and Parashant canyons to determine if designation as SRMA or RCA is warranted. We recognize their value for backcountry recreation and scenery. We have concluded that these canyons do not have important overlapping resource values as defined for an RCA or require intensive recreation management as in an SRMA. We plan on closing the area to OHV activity to protect and maintain the scenic values and remoteness of the area.

We have reviewed Andrus Canyon to determine if special values extend into the planning area. We have concluded that the values in Andrus Canyon are special, but not of the significance that would require an ACEC designation. We plan on closing the area to OHV activity to protect and maintain the beauty and remoteness of the area. The majority of people coming to the Grand Canyon region would not seek out Andrus Canyon to satisfy their outdoor experience. The district has many more canyons in the Grand Canyon National Park or Lake Mead National Recreation Area that have significant and outstanding features superior to Andrus Canyon. Therefore, their scenic resource values are not more than locally significant, and they do not possess scenery unique to the Grand Canyon region.

Also, the values in Andrus Canyon were thoroughly considered by the wilderness coalition and by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). Congress designated 265,600 acres as wilderness on BLM-administered lands in Arizona and then stated that lands "not designated as wilderness by this Act have been adequately studied for wilderness designation." Congress intended that lands unsuitable for wilderness designation be returned to multiple use management. In the period leading to the 1984 Wilderness Act, representatives of many organizations participated in the "good faith" understanding that lands in the Arizona Strip released by the Act would be returned to multiple use management and not placed in a protective status.

Grand Wash Cliffs

We have reviewed the southern Grand Wash Cliffs to determine if designation as an SRMA or RCA is warranted. We recognize its value for backcountry recreation and scenery as outlined in the House Report on the 1984 Arizona Wilderness Act. We have concluded that these cliffs and canyons do not have important overlapping resource values as defined for an RCA or require intensive recreation management as in an SRMA. We are planning on limiting OHV activity in the southern Grand Wash Cliffs and Hidden Canyon to designated roads and trails to protect and maintain the scenic values and remoteness of the area.

Witch Pool ACEC

The Witch Pool ACEC designation highlights an area where special management attention is needed to protect important cultural values and prevent irreparable damage to them. The ACEC designation indicates to the public that the BLM recognizes that an area has significant values and has established special management measures to protect those values. In addition, designation also serves as a reminder that significant values or resources must be accommodated when future management actions and land use proposals are considered near or within an ACEC. Our data base does not support the increase in size due to cultural values. Also, an increase in size of ACEC as a buffer would place unnecessary restrictions on other multiple use considerations in the buffer area and result in duplication of protection measures.

Paria Plateau

We agree that the cultural resources on the Paria Plateau are of significance that warrant special attention. Our District Advisory Council made the following resolution affecting our ACEC considerations: "The council recommends that the Arizona Strip BLM should carefully review all of the ACEC recommendations to ascertain whether it would be advisable to call public attention to each of these sites, or whether it would be in the best interest of protecting the special cultural or natural resource values to merely implement protective management stipulations for any of these areas without the attention getting ACEC label." Based on the resolution and consideration of all the resources in

the area, we concluded the cultural resources would best be addressed in an RCA which would have the same management prescriptions applied without the attention-getting name. This would also be consistent with the proposed RCA designation for Mt. Trumbull which is another large area important for cultural resource values.

Grand Canyon Park Boundary

ACEC designations highlight areas where special management attention is needed to protect important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes and prevent irreparable damage to them; or to protect human life and safety from natural hazards. ACECs must meet relevance and importance criteria as outlined in 43 CFR 1610.7-2 before they are considered for designation. ACECs are not designated merely to provide a buffer for other areas such as wilderness or national park. The areas you have referred to as adjacent to the Grand Canyon National Park's northern boundary have been considered, but do not meet the ACEC criteria.

Also, these areas were thoroughly considered by the wilderness coalition and by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). Congress designated 265,600 acres as wilderness on BLM-administered lands in Arizona and then stated that lands "not designated as wilderness by this Act have been adequately studied for wilderness designation." Congress intended that lands unsuitable for wilderness designation be returned to multiple use management. In the period leading to the 1984 Wilderness Act, representatives of many organizations participated in the "good faith" understanding that lands in the Arizona Strip released by the Act would be returned to multiple use management and not placed in a protective status.

Increase Size of ACECs to Buffer their Special Resource Values

ACEC designations highlight areas where special management attention is needed to protect important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. The ACEC designation indicates to the public that the BLM recognizes an area has significant values and has established special management measures to protect those values. In addition, designation also serves as a reminder that significant values or resources must be accommodated when future management actions and land use proposals are considered near or within an ACEC. Increasing the size of ACECs as a buffer would place unnecessary restrictions on other multiple use considerations in the buffer area and cause duplication of protection measures. The lands included in the proposed addition of a buffer zone do not meet the relevance and importance criteria as outlined in 43 CFR 1610.7-2. Endangered species outside the designated ACECs would still come under protection of the Endangered Species Act.

Closure of ACECs to Mineral Entry

Closure to mineral entry would be subject to valid existing rights, including valid mining claims, in effect on the date of withdrawal. Valid existing rights on mining claims include the right to develop the locatable minerals beneath them. Of the areas recommended for closure to mineral exploration, most of the Beaver Dam and Marble Canyon ACECs are presently covered by existing mining claims. For this reason, a closure to mineral entry would not preclude or further restrict mineral-related activities in these areas.

The ACEC designation requires mining exploration and development entities to file a plan of operations with BLM for activities beyond casual use. Approval of the plan of operations by BLM assures that activities are conducted in a manner that prevents unnecessary or undue degradation, provides protection to non-mineral resources, and provides for reclamation of disturbed areas.

Any actions authorized, funded or carried out by BLM which may affect listed species or those proposed to be listed are reviewed in cooperation with FWS to ensure the action is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical.

While there may be impacts to wildlife, natural beauty, and recreational opportunities associated with current mineral exploration and development on the Arizona Strip, our environmental analyses have shown that they are minor. They are also temporary since surface impacts from mineral operations must be reclaimed as soon as practicable.

The three Hack Canyon mines, developed from two surface facilities were closed and fully reclaimed in 1988. This reclamation has been recognized by several environmental organizations as a significant model of just how well prior mining sites can be restored to a natural condition. Based on our experience during the

quate to allow mineral activities while protecting other important resource values.

PONDEROSA PINE MANAGEMENT

The ponderosa pine forests are a unique and important component of the public lands of the Arizona Strip District. In addition to providing biological diversity, these forest ecosystems are valuable habitat for diverse forms of wildlife and provide unique backcountry resource settings which enhance public recreation opportunities and experiences. Moreover, because of the importance of these forests and their associated resources to diverse public uses, commercial forestry or harvest are not objectives of the proposed forest management program. An active forest management program is, however, clearly necessary to maintain healthy, viable and biologically diverse forest ecosystems and to manage the areas so that existing ground fire fuels are reduced and kept to a manageable level.

LIVESTOCK GRAZING

The RMP discusses the livestock grazing program in Chapter III and in Appendices 1 through 3 (pages A-1 to A-8). The appendices show by allotment, their current management, proposed management, stage of implementation, vegetation trend and range of utilization levels up to 1988.

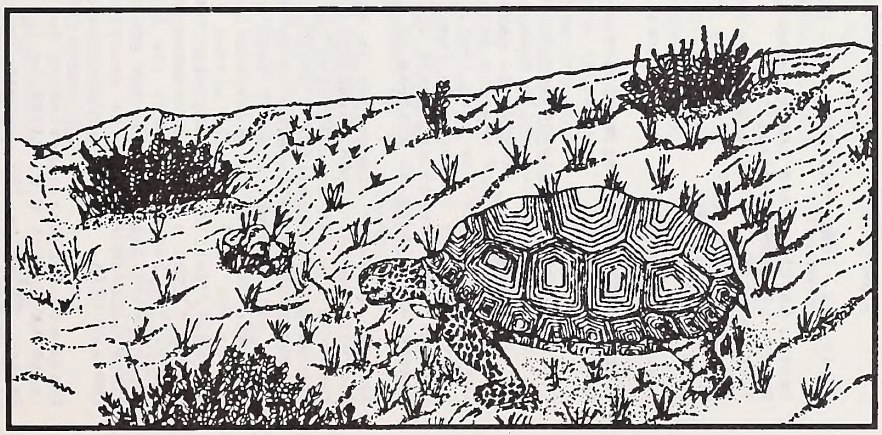
The Vermillion and Shivwits grazing environmental statements of 1979 and 1980 evaluated by allotment, what alternative levels of grazing and no grazing would do to each allotment's vegetation, watershed, wildlife, etc. resources. This data was drawn from existing research data and monitoring studies within the district.

Currently, vegetation trend and utilization of forage studies are gathered from 500+ key areas. This information has been gathered for 10-20 years. Our annual evaluations continue to demonstrate as stated in the grazing EIS, that the vegetation resource improves species diversity under proper grazing (under 50 percent utilization and periodic rest) and degrades under improper grazing (over 50 percent utilization for more than 1 year and yearlong use). Other resources also improve or degrade accordingly. Much of the debate over grazing on public land pertains to issues such as what are proper grazing fee levels; is livestock grazing use of public lands acceptable to the public; and will BLM regulate the rancher in a manner consistent with what the public expects through their laws. These issues do not belong in an RMP.

FISH AND WILDLIFE SERVICE, SECTION 7 CONSULTATION

Section 7 of the Endangered Species Act of 1973, as amended (ESA), requires every federal agency, in consultation with the U.S. Fish and Wildlife Service, to ensure that any action it authorizes, funds or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Further, Section 7 requires federal agencies to confer with the Secretary on any action which is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat.

Persuant to an understanding with the U.S. Fish and Wildlife Service, the draft RMP/EIS was submitted to the USFWS for consultation under Section 7 of the ESA. The memorandum found on pages V-393 through V-398 is the result of this consultation. The BLM response to the consultation is found on page V-398. A second opinion was requested in relation to the sale/exchange of 210 acres of historic tortoise habitat.



01-01

DAVID L. SCHEIN
512 SOUTH NA-WA-TA AVENUE
MOUNT PROSPECT, ILLINOIS 60056-3624

Christmas, 1989; -10°C

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District Office
390 North 3050 East
St. George, Utah 84770

Subject: RMP and EIS (Draft)
Arizona Strip District

Dear Mr. Curtis:

Thank you for sending me the above-referenced document for my review and comment.

First, I support Alternative 3, which would give the maximum protection to wilderness values while allowing legitimate mineral recovery efforts and pre-existing ranging to take place. Minimizing road building, mining, grazing, and keeping other related activities to their present levels will allow for more thorough evaluation of the wilderness and near-wilderness resource in the future if the political tides should change. But precluding these options by expanding mineral activity (where likelihood of success is slight at the onset) is shortsighted.

Second, I see no discussion in the EIS of FLOODPLAIN PROTECTION. Executive Order 11988, protection of Floodplains/Floodplain Management requires the BLM to undertake an investigation to determine any of the proposed activities ("actions" as defined in the Order, not just construction) are located or to be located in a "100-year" floodplain. There was no discussion of this as far as I could see, and if this was omitted it could cause the Council of Environmental Quality to reject the DEIS. If the action does take place in the floodplain, then an 8-step public review period is necessary, mitigative actions are required, and a separate statement for the need as to why this action can not be located outside the floodplain. Also, a thorough discussion of the physical, social, and economic impacts of any new or increased floodplain development is necessary. These were all missing from the RMP and DEIS. 1 2

Thank you for the opportuniyt to comment. You can learn more about compliance with E.O. 11988 by calling the Federal Emergency Management Agency, Building 710, Denver Federal Center and they can help you with your compliance problems.

Thank you.

Sincerely,

David L Schein

01-01

1. A districtwide objective concerning floodplain management has been added to the proposed RMP, see page II-2. The BLM policy on floodplain management is in BLM Manual 7260, 1984. This section reads as follows:

   Policy.

   A. The Bureau of Land Management shall, through its resource management planning and decision process, actively strive to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare and to restore and preserve the natural values served by floodplains and their associated wetlands. This policy pertains specifically to Bureau responsibilities for:

      1. Acquiring, exchanging and disposing of public lands and facilities.

      2. Construction of improvements on public lands by the BLM or its permittees and users.

      3. Conducting various resource management activities including: changes in land use, granting of rights-of-way and easements, resource developments and licensed or permitted activities.

   B. All floodplain and associated wetland areas must be retained in Federal ownership if their disposal would violate the intent of Executive Order 11988.

   C. The Bureau will thoroughly evaluate the potential effects of proposed actions it may take in the floodplain and associated wetlands and consider alternatives to avoid adverse floodplain and wetland impacts. Where the action must involve the floodplains, develop procedures, stipulations or restrictions, as appropriate, to minimize potential harm to or within the floodplain and its wetlands. Floodplain management is addressed in Table II-1, page II-13.

2. Any proposed action located on a 100-year floodplain is subject to review under EO11988 and Bureau Manuals 6740 and 7260. Environmental assessments (EAs) are written to evaluate impacts of such actions and elements such as the social, physical and economic impacts are included. Public review, needs assessment and mitigation are all part of the EA process.

ARIZONA STATE PARKS

800 W. WASHINGTON
SUITE 415
PHOENIX, ARIZONA 85007
TELEPHONE 602-542-4174

ROSE MOFFORD
GOVERNOR

STATE PARKS
BOARD MEMBERS

JONI BOSH
CHAIR
PHOENIX

WILLIAM G. ROE
VICE CHAIR
TUCSON

RONALD PIES
SECRETARY
TEMPE

DEAN M. FLAKE
SNOWFLAKE

DUANE MILLER
SEDONA

ELIZABETH TEA
DUNCAN

M. JEAN HASSELL
STATE LAND COMMISSIONER

KENNETH E. TRAVOUS
EXECUTIVE DIRECTOR

COURTLAND NELSON
DEPUTY DIRECTOR

January 3, 1990

Dennis Curtis
DOI-Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

RE: Arizona Strip District, Draft Resource Management Plan/Environmental Impact Statement, DOI-BLM

Dear Mr. Curtis:

Thank you for submitting this documentation to you. I have reviewed the draft and have the following comments:

1. I note that four different management plans for the multiple use of resources within the Arizona Strip District are being considered by the agency. This area is characterized by a diverse and unique set of archaeological and historic remains, and we are pleased that the management and protection of these valuable cultural resources are being considered in this early planning stage.

2. The agency has identified areas within the District that contain high densities of cultural resources; these areas are considered priority areas of cultural significance and comprise the units that are examined in the four management alternatives. Although it is acknowledged that other areas of cultural significance exist within the district, only the priority areas are discussed within this document. The intensity of impacts to cultural resources that would result with each plan are investigated and include vandalism, off-road vehicle traffic, natural processes, and BLM authorized use (permits and projects). These impacts are characterized as to high, moderate, or low levels of intensity and are summarized by priority area in Table IV-1 of the document.

3. Alternative #1 is the current management plan and does not appear to benefit the cultural resources as well as the three other plans because impacts to cultural remains would continue at moderate and high levels (according to Table IV-1). Thus, this plan is not a good alternative for the management and protection of cultural resources.

4. Alternatives #2 and #3 appear to provide the best management and protective measures for cultural properties in the priority areas. According to Table IV-1, management planning under Alternative #3 appears to be the best as it would ensure that impacts to cultural resources would only occur at low levels, and that 404,810 acres of land within the priority areas would fall under special management designations such as Areas of Critical Environmental Concern (ACEC) and Special Recreation Management Areas (SRMA). Alternative #2 would result in primarily low impacts, but also some moderate level impacts in one of the priority areas; this plan would result in 445,210 acres coming under special management designations of ACEC, SRMA, and Resource Conservation Areas (RCA).

5. Adverse impacts of moderate-to-high losses to cultural remains under Alternative #4 would essentially be the same as those currently experienced in Alternative #1, with the exception that one priority area would be designated as an ACEC. Thus, this plan is better than Alternative #1, but not as beneficial to the protection of cultural properties as are Alternatives #2 and #3.

6. Therefore, it is my opinion that Alternative #3 would result in the fewest adverse effects to the priority areas of cultural significance. All identified impacts to cultural remains associated with this management plan would be of a low level of intensity and 14 areas would receive special management designations.

This office looks forward to receiving the final Management Plan/Environmental Impact Statement for the BLM Arizona Strip District for our review and comment.

Sincerely,

Ann V. Howard

Ann Valdo Howard
Archaeologist

for Shereen Lerner, Ph.D.
State Historic Preservation Officer

State of Arizona
Arizona Geological Survey
845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Rose Mofford
Governor

Larry D. Fellows
Director and State Geologist

January 11, 1990

Mr. Dennis Curtis, Team Leader
BLM, Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I've reviewed the Draft Arizona Strip District Resource Management Plan and Environmental Impact Statement and have a minor comment to make. In Chapter III--Affected Environment the origin and occurrence of uranium in breccia pipes are discussed. In reviewing the list of references cited I find two of the most recent were articles not included. You might have not listed them on purpose. Just in case you are not aware of them, however, they are:

U.S. Geological Survey Open-File Report 89-0173: Lithotectonic setting necessary for formation a uranium-rich, solution-collapse, breccia-pipe province, Grand Canyon region, Arizona, by Karen J. Wenrich and Hoyt B. Sutphin. 1

U.S. Geological Survey Open-File Report 89-550: Map of locations of collapse-breccia pipes in the Grand Canyon region of Arizona, by H.B. Sutphin and K.J. Wenrich.

Please forward this information to John Branch and/or any other geologists on your staff.

If we can ever be of any assistance, please contact me.

Sincerely,

Larry D. Fellows

Larry D. Fellows
Director and State Geologist

LDF:lc

01-03

1. Thank you for these useful references. Copies of both references have been obtained for the district library and reviewed by the staff.

Arizona Commission of
Agriculture and Horticulture
1688 WEST ADAMS • PHOENIX, ARIZONA 85007 • (602) 542-4373

FIELD SERVICES

District Offices
Fruit & Vegetable Standardization
Market News

Office of the State Chemist
State Agricultural Laboratory
Agricultural Chemicals and
Environmental Services Division

January 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The Arizona Commission of Agriculture and Horticulture has the following concerns about the Arizona Strip District EIS draft:

1. There are no grasshopper management plans specified in the document; |1
2. There are no survey plans to determine if endangered species exist, where they are located, and if they are truly endangered. |2

The Commission feels that without this information, there will not be effective land management in the strip area.

Sincerely,

Ivan J. Shields
Director

IJS/me

01-04

1. Grasshopper management plans are included in the Existing Plans and Decisions section in Table II-1, page II-22 . In addition, grasshopper management plans are "activity level" plans that must comply with the overall RMP objectives, but which are not specifically addressed in the RMP.

2. More complete information on the presence and areas inhabited by endangered species would be helpful. Surveys for endangered species are included in the Existing Plans and Decisions section in Table II-1, page II-17.

San Carlos Trailer Club
Apdo Postal 21
San Carlos, Sonora 85506
January 15, 1990

Mr. G. William Lamb, District Manager
Bureau of Land Management
Arizona Strip District Office
390 North 3050 East
St. George, UT 84770

Dear Bill:

Thank you for your letter of January 4. The proposed council meeting dates of April 5-6 are good for me and I have put them on the calendar.

I've reviewed the DEA for the Quail Hill Road reconstruction that you sent along. It appears to be thorough, but I've not been in that area in several years. I have no comments except to ask if the peoposed alignment has taken the concerns of the Advisory Council into consideration (Minutes of Nov. 1-2 meeting)?.

I've also completed a review of the RMP and DEIS. In general the work appears to be quite comprehensive and well done. I do, however, have a few observations, comments and rhetorical questions that I've grouped together below.

For ease of reference I've numbered the Districtwide Objectives on pages II-1 and II-2. My comments here are of a general nature. They have to do with word selection and connotation; and with, perhaps, an overall inference that the Strip is managed more in the local than the National interest.

Objective #3 speaks to "the Nations need" for various products "from the public lands" and the "importance of these industries to local and regional economies". By grouping these together you leave me with a question as to which of the two is the driving force -- the Nations need or the importance of the industry locally? Similarly, I don't doubt that there is a national need for energy, mineral and livestock production but, given that I haven't reviewed FLPMA recently, I do have reservations that meeting these needs is or should be a high priority of the Bureau. 1

Objective #7 speaks to forage, watershed and wildlife needs. Who defined those needs and on what basis? 2

Objective #8 seems to say, in effect, that development of mineral resources is a top priority of the plan.

Objectives #8, #19 and possibly others refer to "the extent practicable". I take great personal unbrage to the word "practicable". At best it's a 'weasel word' for tacit approval of long term degradation of natural environment. 3

1. The Federal Land Policy and Management Act of 1976, sec. 102(a)12 states "the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands. . . ." The FLPMA reference also has local application. The objectives listed in the plan are not equal in importance or listed in priority. They provide general guidance for development of the RMP.

2. The objectives, as well as the entire RMP, are the product of an interdisciplinary team as well as state and district management. Individual resource specialists analyzes the current management situation, problems and needs and opportunities for solving the problems. This backup information is found in the district area files. The basis for making this analysis varied by resource. Need was usually determined by analyzing dependent physical factors and then reviewing socio/economic demands.

3. The phrase "the extent practicable" was used in the document because it recognized that some objectives are not fully obtainable in all situations due to factors such as funding, varying priorities, personnel limitations, and the physical limitations of the resources involved.

Objective #18 refers to access to meet "public needs". I well recognize that any one or more persons or groups is "the public". I'd feel better if the objective dealt with meeting the needs of a "majority of the public users" or was "in the overall public best interest". 4

The RMP and DEIS treat only lightly with wildlife populations and the impacts they might receive. Discussion is limited to a handful of huntable species and a couple of RTE species. Certainly we both know there is more wildlife represented on the District than only these species. I'm guessing that much wildlife data and consultation probably came from the AGFD. You must realize that that organization, while charged with management of ALL wildlife species under State Law, is oriented primarily and almost exclusively by Commission policy toward huntable species. I'd suggest that the final document contain sections or subsections dealing with small non-game mammals, reptiles, non-game birds and fishes in general. Of especial interest would be the impacts of Ponderosa pine forest management or P-J thinning actions on regional populations of migratory non-game song birds. (A couple of years ago, in Illinois, I was stopped from a proposed management action to enhance deer habitat by thinning an even aged hardwood stand. The ornithologists contended that opening such a stand would have dramatic adverse impacts on whole populations of neo-tropical warblers that nested in the upper mid-west.) Similarly, I'd love to see someone do an analysis of impacts to small wildlife (voles, reptiles, small birds, etc.) from HRM grazing practices. 5

In Chapter IV I was impressed with the matrix approach to impact analysis. Given my background with NEPA (I helped develop the initial Interior guidelines when I was in the Secretary's office) and years with the National Park Service and various state resource management agencies, I looked in this Chapter for a statement or analysis of proposed management practices on the natural environment. I was disappointed to note that your team had dealt in reasonable, sometimes painful, detail with economic, cultural, social and all of the "modern" nonnatural environments but had scarcely mentioned the basic, natural environment, that was, as I recall, the primary thrust of NEPA. 6

Lastly, as I'm sure you are aware by now, there are a number of editing oversights.

I appreciate the opportunity to review the RMP and look forward to getting together with you and the Council members in early April.

Sincerely,

Temple A. Reynolds

01-05 (continued)

4. See revised text, page II-2.

5. Specific wildlife habitat objectives and on-the-ground management direction of game and non-game species are included in six existing Habitat Management Plans (HMPs) which presently cover the entire district. These plans are incorporated in the RMP by reference. The objectives of these HMPs and for non-game species are found in Appendix 17. The text has been changed in Table II-1, page II-25, that further emphasizes the need to incorporate non-game species needs into management of the public lands. The RMP provides guidance for HMP revisions (page II-26).

6. Council on Environmental Quality (CEQ) regulations 1502.15 state that the "environmental impact statement shall succinctly describe the environment of the area(s) to be affected. . . . ". The statutory requirement of NEPA is to prepare EISs on federal actions significantly affecting the human environment, 1502.3.

United States Department of the Interior
BUREAU OF MINES
P. O. BOX 25086
BUILDING 20, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

Intermountain Field Operations Center

January 16, 1990

Memorandum

To: Dennis Curtis, Bureau of Land Management, Arizona Strip District, 390 North 3050 East, St. George, Utah 84770

From: Chief, Intermountain Field Operations Center

Subject: Review of Bureau of Land Management Resources Management Plan and Environmental Impact Statement for the Arizona Strip, Arizona

Bureau of Mines personnel reviewed the subject document relative to possible impacts on mineral resources and mineral production facilities as requested.

The management plan discusses the mineral deposits in the Arizona Strip with special emphasis on breccia pipe deposits; most recent exploration has been for uranium in the pipes. Our comments on the report are as follows:

Page III-6. We suggest that in addition to the gravel deposits discussed in this section that a description of the large, although uneconomic, aeolian sand deposits in the eastern Arizona Strip (Paria Plateau) be included in subsequent versions of the document. | 1

It also should be mentioned that several Bureau of Mines (BOM) and U.S. Geological Survey (USGS) mineral investigations have been conducted in the Arizona Strip. Reports resulting from the investigations have been published and include: Pigeon Canyon, Nevershine Mesa, Snap Point, Emmett Wash, Paria Plateau, Paria Canyon-Vermilion Cliffs, Kanab Creek, Mt. Trumbull, and Paiute study areas. These publications are available as either BOM open file reports or USGS Bulletins. | 2

Page III-5-under uranium-paragraph 3. We believe that it should be explained that uranium deposits in the Shinarump Member of the Chinle Formation are in ancient stream channels characterized by the carbonaceous trash typical of such deposits. | 3

Bradford B Williams
for William Cochran

01-06

1. Large eolian sand deposits, like deposits of building stone, occur in various areas throughout the district. Widespread occurrences of these commodities make them only locally significant. As the demand for these commodities is expected to continue to be minimal over the life of the plan, impacts from their development are not expected to be significant. It is for this reason that these commodities were not specifically addressed in the RMP.

2. Thank you for this information. The Management Situation Analysis (MSA) prepared by the district staff contains base line resource information, current through mid-1988, from which the RMP was developed. All of the referenced Bureau of Mines and Geological Survey reports are on file in the district library and were reviewed during preparation of the MSA. Given the focus of the RMP on various planning alternatives and their related impacts to resources on the public lands, it is impractical to include all of the information reviewed for or referenced in the MSA. The affected environment section of the RMP contains only a summary of the information contained in the MSA.

3. This information has been added to the text.

ROSE MOFFORD
GOVERNOR

ARIZONA DEPARTMENT OF COMMERCE

STATE CAPITOL
1700 WEST WASHINGTON
PHOENIX, ARIZONA 85007
(602) 255-5371

DAVID P. JANKOFSKY
DIRECTOR

MEMORANDUM

TO : DOI BLM

FROM : ARIZONA STATE CLEARINGHOUSE

DATE : January 19, 1990

RE : BUREAU OF LAND MANAGEMENT
AZ STRIP DIST. EIS DRAFT 15.999
AZ891215800032

This memorandum is in response to the above project submitted to the Arizona State Clearinghouse for review.

The project has been reviewed pursuant to the Executive Order 12372 by certain Arizona State officials and Regional Councils of Government.

Comments were received from the Land Department and the BLM's Arizona Strip District was put on hold because of questions of its legality. When clarification from the State Surpreme Court comes through please resubmit your environment impact statement.

Comments were also received from the Arizona Department of Health Services, and Agriculture and Horticulture Department. The comments are enclosed for your information.

Thank you.

Janice Dunn, Director
Arizona State Clearinghouse

Attachment

cc: Arizona State Clearinghouse
Applicant

V-17

Comment Form To Be Completed by Reviewing Agency

TO: DATE: DEC 15 1989

AZ 89800032
State Application Identifier (SAI)

Director
Dept. of Health Services
1740 W. Adams St.
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, AZ 85007

- AZ Environ. Qlty Rm 304
- AZ Environ. Qlty Rm 400-B
- AZ Environ. Qlty Rm 603A
- Economic Sec.
- Indian Affairs
- Transportation
- Public Safety
- Mineral Res.
- Att'y General
- Corrections
- Civil Rights
- Education
- Gov's Office for Children
- Administration - 424 Form
- JLBC
- DDD-DES
- Game & Fish
- Salt Rv Indian Clearinghouse
- Navajo Indian Clearinghouse
- Ag. & Hort.
- Tourism
- Health
- Water
- Parks
- Land
- Commerce
- Region I, II (III) IV, V,
- State Lands

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM ONLY, AND ONE XEROX COPY to the Clearinghouse within 17 WORKING DAYS from the date received. Please contact the Clearinghouse at 542-5004 if you need further information or additional time for review.

_____ No comment on this project __XX__ Proposal is supported as written _____ Comments as indicated below

1. Is project consistent with your agency goals and objectives? __XX__ Yes _____ No _____ Not Relative to this agency

2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? __XX__ Yes _____ No

3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? _____ Yes __XX__ No

4. Will project have an adverse effect on existing programs in your agency or within project impact area? _____ Yes __XX__ No

5. Does project violate any rules or regulations of your agency? _____ Yes __XX__ No

6. Does project adequately address the intended effects on target population? __XX__ Yes _____ No

7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? __XX__ Yes _____ No

Additional Comments (Use back of sheet, if necessary):

Because niether the proposed alternative nor other alternatives suggest a dramatic increase of human activity in this area, we see no reason for an increase in public health problems. However, it should be noted that increased human use of this region could result in increased human exposure to the vector borne diseases of tularemia, plague and relapsing fever.

Reviewers Signature _____ Date January 8, 1990

Title Chief, Office of Risk Assessment and Investigation Telephone 230-5858

Comment Form To Be ated by Reviewing Agency

TO: DATE: DEC 15 1989

AZ 89800032
State Application Identifier (SAI)

Land
M. J. Hassell
Natural Resources
1616 W. Adams
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, AZ 85007

- AZ Environ. Qlty Rm 304
- AZ Environ. Qlty Rm 400-B
- AZ Environ. Qlty Rm 603A
- Economic Sec.
- Indian Affairs
- Transportation
- Public Safety
- Mineral Res.
- Att'y General
- Corrections
- Civil Rights
- Education
- Gov's Office for Children
- Administration - 424 Form
- JLBC
- DDD-DES
- Game & Fish
- Salt Rv Indian Clearinghouse
- Navajo Indian Clearinghouse
- Ag. & Hort.
- Tourism
- Health
- Water
- Parks
- Land
- Commerce
- Region I, II (III) IV, V,

* Quad Lands

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM ONLY, AND ONE XEROX COPY to the Clearinghouse within 17 WORKING DAYS from the date received. Please contact the Clearinghouse at 542-5004 if you need further information or additional time for review.

_____ No comment on this project _____ Proposal is supported as written __X__ Comments as indicated below

1. Is project consistent with your agency goals and objectives? __X__ Yes _____ No _____ Not Relative to this agency

2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? __X__ Yes _____ No

3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? _____ Yes __X__ No

4. Will project have an adverse effect on existing programs in your agency or within project impact area? _____ Yes __X__ No

5. Does project violate any rules or regulations of your agency? _____ Yes __X__ No

6. Does project adequately address the intended effects on target population? _____ Yes __X__ No

7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? __X__ Yes _____ No

Additional Comments (Use back of sheet, if necessary):

The State Land Department Land Exchange Program with BLM's Arizona Strip District was put on hold because of questions of its legality. We are currently awaiting clarification from the State Surpreme Court to see if we will be able to proceed. If we proceed and reduce our holdings on the strip, few conflicts with public land management mandates are anticipated.

Reviewers Signature Robert G. Lent Date January 16, 1990

Title DIRECTOR, DIVISION OF NATURAL RESOURCES Telephone 542-4625

ARIZONA DEPARTMENT OF HEALTH SERVICES

ROSE MOFFORD, GOVERNOR
TED WILLIAMS, DIRECTOR

Division of Disease Prevention
3008 North 3rd Street
Phoenix, Arizona 85012
(602) 230-5808

January 8, 1990

Arizona State Clearinghouse
1700 West Washington Street
4th Floor
Phoenix, Arizona 85007

To Whom It May Concern:

The Arizona Strip District Resource Management Plan and Environmental Impact Statement Draft was referred to this Division for review and comment. The draft was reviewed with particular emphasis on factors that could influence disease causation in the affected area.

The review found no health-based reason to object to the proposed plan. Accordingly, the completed form supporting the proposal is returned herewith.

Sincerely,

Steven J. Englender, M.D., M.P.H.
Assistant Director

SJE/NJP/jls

Enclosure

cc: Ted Williams

90-01-08:DEQ:SJE:NJP:jls

The Department of Health Services is An Equal Opportunity Affirmative Action Employer.

State Health Building 1740 West Adams Street Phoenix, Arizona 85007

01-07 (continued)

Thurston

Comment Form To Be Completed by Reviewing Agency

TO: DATE: DEC 15 1989 RECD

AZ 89800032
State Application Identifier (SAI)

Director
Agriculture & Horticulture Dept
421 Capitol Annex West
Phoenix, AZ 85007

DEC 22 1989
AZ COMM. OF AG & HORT

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, AZ 85007

- ★ AZ Environ. Qlty Rm 304
- AZ Environ. Qlty Rm 400-B
- ★ AZ Environ. Qlty Rm 603A
- Economic Sec.
- ★ Indian Affairs
- ★ Transportation
- ★ Public Safety
- ★ Mineral Res.
- Att'y General
- Corrections
- Civil Rights
- Education
- Gov's Office for Children
- Administration - 424 Form
- JLBC ★ Avid Lando
- DOD-DES
- ★ Game & Fish
- Salt Rv Indian Clearinghouse
- Navajo Indian Clearinghouse
- ★ Ag. & Hort.
- Tourism
- ★ Health
- ★ Water
- ★ Parks
- ★ Land
- Commerce
- ★ Region I, II
- (III) IV, V,

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM ONLY, AND ONE XEROX COPY to the Clearinghouse within 17 WORKING DAYS from the date received. Please contact the Clearinghouse at 542-5004 if you need further information or additional time for review.

_____ No comment on this project _____ Proposal is supported as written ✓ Comments as indicated below

1. Is project consistent with your agency goals and objectives? _____ Yes _____ No _____ Not Relative to this agency
2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? _____ Yes _____ No
3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? _____ Yes _____ No
4. Will project have an adverse effect on existing programs in your agency or within project impact area? _____ Yes _____ No
5. Does project violate any rules or regulations of your agency? _____ Yes _____ No
6. Does project adequately address the intended effects on target population? _____ Yes ✓ No
7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? _____ Yes _____ No

Additional Comments (Use back of sheet, if necessary):

Does not address management of Endangered and Protected plant species or Grasshopper control.

Reviewers Signature William Gorman Date 1-5-90

Title _____ Telephone _____

V-19

Comment Form To Be Completed by Reviewing Agency

TO: DATE: DEC 15 1989

AZ 89800032
State Application Identifier (SAI)

ADOT
206 S. 17th Ave.
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, AZ 85007

RECEIVED
DEC 28 1989
ARIZONA DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION
ENVIRONMENTAL PLANNING SERVICES

- ★ AZ Environ. Qlty Rm 304
- AZ Environ. Qlty Rm 400-B
- ★ AZ Environ. Qlty Rm 603A
- Economic Sec.
- ★ Indian Affairs
- ★ Transportation
- ★ Public Safety
- ★ Mineral Res.
- Att'y General
- Corrections
- Civil Rights
- Education
- Gov's Office for Children
- Administration - 424 Form
- JLBC ★ Avid Lando
- DOD-DES
- ★ Game & Fish
- Salt Rv Indian Clearinghouse
- Navajo Indian Clearinghouse
- ★ Ag. & Hort.
- Tourism
- ★ Health
- ★ Water
- ★ Parks
- ★ Land
- Commerce
- ★ Region I, II
- (III) IV, V, \

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM ONLY, AND ONE XEROX COPY to the Clearinghouse within 17 WORKING DAYS from the date received. Please contact the Clearinghouse at 542-5004 if you need further information or additional time for review.

_____ No comment on this project _____ Proposal is supported as written ✓ Comments as indicated below

1. Is project consistent with your agency goals and objectives? _____ Yes _____ No ✓ Not Relative to this agency
2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? ✓ Yes _____ No
3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? ✓ Yes _____ No
4. Will project have an adverse effect on existing programs in your agency or within project impact area? _____ Yes ✓ No
5. Does project violate any rules or regulations of your agency? _____ Yes ✓ No
6. Does project adequately address the intended effects on target population? ✓ Yes _____ No
7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ✓ Yes _____ No

Additional Comments (Use back of sheet, if necessary):

Reviewers Signature Michael P. Dale Date 1/3/90

Title MANAGER, ENVIRONMENTAL PLANNING SERVICES, ADOT Telephone 255-7767

Andrew McConkey
3590 Berkley AV
Boulder, CO 80303
12/10/89

Dennis Curtis
BLM, AZ Strip District
390 N 3050 E.
St. George, UT 84770

Dear Sir:

The following are my comments on the draft RMP/EIS for the AZ Strip District:

I would prefer to see more than the 92,000 acres suggested in alternative #3 closed entirely to use by OHV's, including more of the ACEC's and special management areas. Additional land could then be restricted for OHV use only on designated roads, without imposing an additional burden on BLM road-designators and enforcement personnel. (The 45,000 acre total closure included in alternative #2 is very much inadequate.)

I do not agree with the decision to leave all roads open in areas where OHV use is going to be limited to designated roads, until BLM has time to decide which roads are to be designated. (p. A-70) Rather, such areas should be closed to OHV use, until road designations have been put in place.

Also, I believe new road construction should be flat out prohibited on some land besides designated wilderness. There are plenty of roads in the district right now; the least spoiled landscapes should be preserved.

In principle, I like the idea of leaving a small area open to OHV use, without restriction, as suggested in alternative #2.

I greatly prefer alternative #3 in regard to mineral development issues, because of its moderating effect on mining impacts that are detrimental to visual and ecological resources. In my estimation, mining in this district has been overemphasised in the past, to the detriment of other uses.

I look forward to a final plan that is more gentle.

Andrew McConkey

continued next page →

01-09

United States Department of Agriculture

Soil Conservation Service

201 East Indianola Avenue
Room 200
Phoenix, Arizona 85012

December 19, 1989

Mr. Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

We have reviewed your Resource Management Plan and Environmental Impact Statement (draft), for the Arizona Strip District dated November 1989.

It is clear to us that an extensive amount of time and effort on the part of many well qualified individuals went into the preparation of this document. We are pleased to see the concern for the need to protect and enhance the riparian habitat adequately addressed in this document. We feel that you have sufficiently considered all aspects of the soil, water, plant, animal and cultural resources of the Arizona Strip District - an area of diverse contrasts in climate, topography and plant and animal life. Proper management of this area will indeed be a complex issue. We concur that Alternative 2 should be the preferred alternative.

Sincerely,

CHARLES R. ADAMS
State Conservationist



The Soil Conservation Service is an agency of the Department of Agriculture

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 905
DENVER FEDERAL CENTER
DENVER, COLORADO 80225
Office of Mineral Resources
Branch of Central Mineral Resources

January 29, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St George, Utah 84770

Dear Mr. Curtis:

I recently received a copy of your report on the "Arizona Strip District", which listed you as the contact person for comments. It is a very attractive volume. I was a bit disappointed that more was not said about the mineral potential of the breccia pipes, which is enormous. In January, 1988 Mr. G. William Lamb requested information from the USGS on the breccia pipes. We (I and Hoyt Sutphin) responded with 4 pages of information plus a bibliography of everything written as of that date on the breccia pipes. I am disappointed that neither the information, nor any of the references, appear to have been used in the preparation of your volume, as we spent considerable time preparing the report. We are always happy to share our expertise with you, especially for such a valuable commodity, but would prefer that our information be applied to the study, as we, like you, do not want to waste our time. Thank you. 1

Sincerely,

Karen J. Wenrich
Geologist

02-01

1. Thank you for the information and references on breccia pipes. The Management Situation Analysis (MSA) prepared by the district staff contains baseline resource information, current through mid-1988, from which the RMP was developed. The geology and mineral resources section of the MSA contains a number of the references supplied by the Geological Survey. In addition, information received from the Geological Survey in 1988 was considered in formulating the mineral resource potential of the district.

   Given the focus of the RMP on various planning alternatives and their related impacts to resources on the public lands, it is impractical to include all of the information and references contained in the MSA in the RMP document. The affected environment section of the RMP contains only a summary of the information contained in the MSA.

Marietta A. Davenport
Badger Creek
Marble Canyon, AZ 86036

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dr. Mr. Curtis:

First let me thank you for this opportunity to respond to the BLM Arizona Strip District Resource Management Plan. As an American and a citizen of northern Arizona I have very strong feelings regarding the management of all public lands.

One item which I believe needs some degree of clarification in your environmental assessment is the issue of grazing. Granted I understand that these issues are covered in seperate documents (Vermillion Grazing EIS's and The Shivwits EIS 1980 - S-1), however, they should still be addressed in greater detail in this document, specifically how they fit into this document. Without addressing them in greater detail your document gives the impression that you are trying to hide something. And, with grazing becoming such a heated issue I would think that you would prefer to be up front with your public. As a public agency you have a sacred trust to uphold. Again I think that the impacts to all aspects of your management plan should have a paragraph (at least) regarding "impacts from range" even if you do not discuss it further elsewhere. Numerous sites are impacted by grazing activity and this issue must be addressed. Do you just assume that grazing preempts cultural resources, or lands, or recreation? 1

The issue of airport location for Page needs to be addressed more specifically also. What are the other alternatives aside from Ferry Swale? I hope that the Ferry Swale location has been deleted from consideration. A few issues that would justify this removal from any future consideration include safety, wilderness impacts and degradation of aesthetic values. 2

At one point in time, I know you were considering the possiblility of removing portions of the Marble Canyon area from impact (II-19) based on threatened and endangered species, and I see that although you have listed this in your Alternative 3 that it is omitted from your preferred Alternative 2. There will be limited impact to recreational use if you delete these areas for protection of Pediocactus. Have you considered maintaining areas in the range of this species for protection? What is your justification for not including it in Alternative 2? Grazing? Recreation (which is extremely limited in these areas anyway)? 3

02-02

1. See general response to public comments, page V-9.

2. Little data exists to do an adequate analysis of the proposed airport in Ferry Swale. Information needs to be gathered and a thorough alternative site analysis completed. The city has been requested to furnish this information. The proposed RMP does not allow an airport in the Ferry Swale area and a plan amendment would be necessary in order to consider one.

3. Under the preferred Alternative 2, 10,700 acres of *Pediocactus bradyii* will be placed in an ACEC. See Table II-2 (Management Prescriptions for Special Management Areas) page II-44. Several protective efforts will remove impacts, such as closing the ACEC to OHVs.

02-02 (continued)

In Alternative 2 you are suggesting development of the Paria Plateau as a Special Recreation Management Area. Granted, the Paria offers amazing opportunities for recreation, but its isolated nature and its relatively pristine condition are national treasures. Should you open this area up for recreation - any further than it is currently? How will you patrol the area and guarantee protection of the myriad cultural and natural resources, which are already being damaged and destroyed at an alarming rate? If your choice is to open this area will you maintian a full time law enforcement person to be on permanent and continual patrol to safeguard sites? How do you intend to address this issue otherwise? Knowing that damage is occurring, especially to non-renewable cultural resources now how can you justify this status when your patrols are not even acceptable for current public use? You may be biting off more than you can chew. 4

Further, regarding the issue of cultural resources I am concerned about the discussion on page IV-34 under the section on Alternative 2 of Impacts to Cultural Resources From Mineral Resource Exploration and Development. It is a verbose rambling of the laws protecting Cultural Resources. What I am curious to know is 1) why don't you include this discussion under impacts by other functions (ie. recreation, woodcutting, etc.); 2) and how do you monitor adherance to these laws? Having lived on the Arizona Strip for 12 years I have familiarized myself with the Strip and various impacts over time. I know from personal communication with locals in Marble Canyon and Fredonia that there has been a considerable impact to sites along the heavily travelled routes used my numerous individuals who work for the mines. In fact professionals on archeaological survey in the Kanab Point area noted extensive damage to sites previous to and during their work. Utilization of a GIS system overlay of information regarding access to the mines and proximity of sites to well-traveled roads would probably startle you as well as provide you with invaluable management information. Perhaps some of the damage may be attributed to recreational users, but some of these "recreational" users may be workers from the mines who have located sites in the course of their work. In fact some personnel are known "pothunters". How do you plan to gather information to verify or negate this concern? I do not mean to accuse the "miners" as a whole, but it only takes one bad apple. Additionally on this topic I wonder why on page IV-34 that in this minerals section there is not the statement noticed under other functions to the effect that sites could be vandalized by individuals working for the mines? Finally, on the topic of Cultural Resources will the designated OHV areas recieve intensive inventory so as to diminish the impact to sites or will these areas be sacrificial? 5 6 7

Sincerely,

Marietta A. Davenport

Marietta A. Davenport

02-02 (continued)

4. The Canyons and Plateaus of the Paria have been changed to a Resource Conservation Area (RCA). A management plan for the RCA will be developed upon approval of the RMP. The management plan will take into consideration recreation, cultural resource, and other resource values. Visitor use will be monitored and may be restricted. An administrative site may be established. The development of the RCA management plan will include public involvement and environmental compliance. All RCAs in the plan have also been proposed as SRMAs for budgetary purposes.

5. Monitoring compliance to protective stipulations is addressed in the person assigned responsibility for the environmental assessments and decision records. It is also evaluated on a random basis by resource specialists. Monitoring is a critical portion of the NEPA process and the results are available for public review.

   Please refer to the final text, page IV-6 under impacts to cultural resources from other program activities for a more complete evaluation of all program impacts.

6. A standard statement used in Alternative 1 in the draft to describe impacts from other programs was omitted from the Mineral Resource Exploration and Development section. Please see this section in Chapter IV of the proposed plan, page IV-6. The impacts of unauthorized use may be reduced but will not be eliminated by any of the alternatives in this plan.

7. There are four proposed OHV designations: (1) closed; (2) limited to designated roads and trails; (3) limited to existing roads and trails, and; (4) open. A cultural resource inventory would be completed on areas designated as open. There is presently only one small area near Fredonia proposed for open designation.

Paul and Martha Strickland
4870 Hornet Drive
Prescott, AZ 86301
February 11, 1989

Dennis Curtis
RMP Team Leader
BLM
390N, 3050E
St. George, Utah 84770

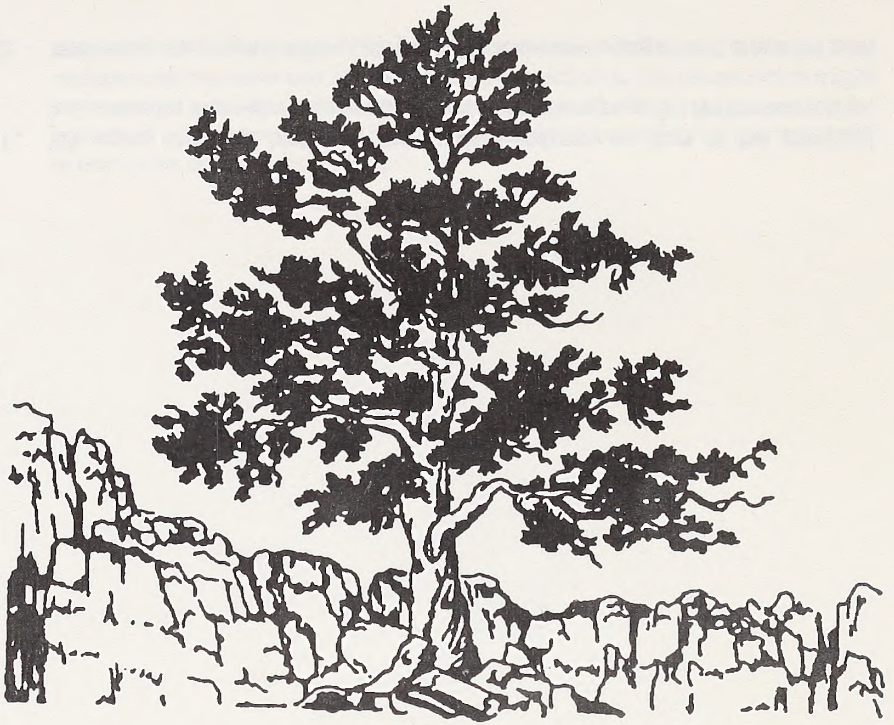
Dear Mr. Curtis:

We are writing to express our concern for the magnificent wildlife area north of the Grand Canyon. All of us in this great state have unique opportunity and responsibility to preserve this area for unborn generations. Please use your good office to assure that air quality and scenic values are preserved, giving particular attention to reduce the impact by "civilization" on threatened and endangered species of life, and very strict monitoring of any mining that may be permitted.

We will follow with keen interest the development of alternative management plans for this area. Thank you in advance for hearing and being sensitive to our concern.

Sincerely,
Paul M. Strickland
Martha C. Strickland
Paul and Martha Strickland

cc: Sen. John Hays
Reps. Dave Carson and Don Aldridge



Stephen J. Finucane
5724 Utah Ave. N.W.
Washington, DC 20015

Dennis Curtis
BLM-ASD
390 North 3050 East
St. George, Utah 84770

2/21/90

Re: Draft RMP/EIS for the Arizona Strip District (November, 1989)

Dear Mr. Curtis,

I would like to thank the BLM for the opportunity to comment on the subject plan, and to commend the overall quality of the research and analyses of the impacts of the alternatives.

I recognize that you are obligated to give special weight to the perceptions of local residents in your analyses, but it appears that too much weight has been given to some individuals with vested interests in extractive industries. The result of this is a failure to fully recognize the recreation value and concomitant revenue associated with recreation-related services.

Evidence of this imbalance first appears on page 2 of the Summary, where you list the principal "industries" of the area, but fail to mention the tourism industry. Yet, on page III- 34 and 35, the importance of tourism is acknowledged. I believe that this is a significant oversight. 1

The draw for the tourists are the wild areas and associated natural values and cultural resources. Accordingly, the remoteness and natural setting warrant even more protection than proposed in Alternative 3. However, among the alternatives described, Alternative 3 is the most cost-beneficial management strategy.

In particular, I support BLM's designation of the Paria Plateau as an ACEC. Alternative 3's ACEC prescription appears to allow the best management of the resources. The addition of Mt. Trumbull and Parashant to the SRMA list of Alternative 3 appears to have the best potential for positive effects on watershed management and cultural/recreation management. Alternative 3's recreation

02-04

1. We agree that not including the tourism industry as part of the principal industries for the region was an oversight. Please see page S-1 for the correction.

2. Alternative II recognizes the quality of the resources managed and offers the best

benefiting proposals will also provide a high sustained yield of economic benefits for the area.

Critical to preserving the resource is well regulated OHV use. The OHV designations in Alternative 3 provide the best protection against misuse of the land by OHVs.

The assertions on page IV-74 and elsewhere need to be reviewed, since it appears probable that revenue from tourism will more than offset any reduction in income resulting from the better management practices associated with Alternative 3. Although there may be strong support for near-term economic extractive exploitation by certain short-sighted local pressure groups, please remember that the resource is a national resource of the quality of a international treasure, and merits a level of protection commensurate with that status. 2

Alternative 3's VRM classification appears to be the best proposed. Preservation of the visual resource should be a critical management concern, given the breadth of potential challenges.

Thank you for this opportunity to comment. I completed my undergraduate work in biology and environmental science in Arizona, and have backpacked extensively in the Paria area. Since I came to Washington, D.C., I have returned to the area frequently, bringing others to invest their scarce leisure time in the spirit-renewing experiences available in the Arizona Strip District.

Sincerely,

Stephen J. Finucane

02-04 (continued)

resolution for the management of those resources. Alternative II meets BLM multiple-use mandate and allows resource protection to the values which might be impacted with less restrictive management goals. Thus, tourism would be enhanced with Alternative II as it provides a balanced approach to management of resources on the Arizona Strip.

02-05

Stephen Schmidt
P.O. Box 1138
Tuba City, AZ
86045

Dear BLM:

I would like to offer my support for Alternative 3 of the Arizona Strip E.I.S.. As a hiker, photographer and a teacher, I feel that these unique wilderness lands should be protected for future generations to use and appreciate. Our backcountry is becomeing more and more impacted by development interest. At the same time, the population of backcountry users, such as myself, is ever increasing.

As a teacher trained first as a botanist, I realize the importance of protecting habitat from careless destruction. I have witnessed major habitat destruction to plants and animals by both ORV's and cattle. Much of this in areas such as the Paria plateau.

I would like to take the time to also point out that many times people who use an area for short periods while exploring and sight seeing do not register with the Forest Service, BLM, or whom ever's land they may be on. There have been many times where I myself did not register at a specific sight, even when spending a night. Other times I was in areas without a register available. The reason I mention this is that I noticed in the E.I.S. how hours of use were calculated for an area, yet I am sure that these are often extremely conservative. I realize that you must use solid hard data. I also ask that you keep in mind the margin of error and realize the growing demand for experiancing the isolation and beauty of these special areas. Thank you for your consideration.

Sincerely,

Stephen Schmidt



02-06

United States Department of the Interior
NATIONAL PARK SERVICE
WESTERN REGION
450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:
L7619(WR-RP)

February 20, 1990

Memorandum

To: District Manager, Arizona Strip District Office, Bureau of Land Management
Attention: Dennis Curtis

From: ACTING Regional Director, Western Region

Subject: Draft Resource Management Plan and Environmental Impact Statement, Bureau of Land Management Arizona Strip District, Utah and Arizona (DES 89/26)

We have reviewed the subject plan and environmental impact statement. The following comments reflect the combined and individual concerns of both our Western and Rocky Mountain Regional Offices and those of Grand Canyon National Park, Glen Canyon and Lake Mead National Recreation Areas and Pipe Spring National Monument.

GENERAL COMMENTS

Management of the Arizona Strip District is of concern to the National Park Service (NPS) because many of the lands included in the plan are near National Park System units. The outstanding scenic and geologic resources for which these park units were established extend well beyond park boundaries to include areas managed by the Bureau of Land Management (BLM).

We believe that the intent of the Federal Land Policy and Management Act and the nationwide agreement between our two agencies requires that impacts to surrounding lands be analyzed. Also, we believe that a complete discussion of how current and projected uses on BLM lands near park units might impact significant park resources and values is required by the Council on Environmental Quality (CEQ) regulations at 40 CFR 1502.16 (c). Accordingly, our comments and recommendations are provided to surface our concerns in order to assist you in satisfying these requirements. 1

1. The document now contains a section on impacts to adjoining lands. See Chapter IV, page IV-30.

2

Overall, we consider the plan's Alternative 3 as preferable because it provides more protection to lands contiguous to our management units--particularly Grand Canyon National Park and Lake Mead National Recreation Area. This alternative appears the most complementary to and consistent with our management goals.

SPECIFIC COMMENTS

A. Mining Activities

1) The major importance of this plan with respect to minerals management relates to locatable minerals. Proposed actions will have little effect on fluid minerals because of the low potential for substantial exploration or production. Mineral materials are available in such abundance in the area that even the most restrictive of the alternatives should have little effect on their availability.

2) The BLM and mine operators on the Arizona Strip have demonstrated a good record of environmental concern and sensitivity to impacts to park resources. The major impacts have been vandalism to cultural sites resulting from improved access to remote areas of Grand Canyon National Park. For this reason, the management status of lands immediately outside of park boundaries is a concern. Alternative 3 provides the best protection for park units because of the establishment of Areas of Critical Environmental Concern (ACEC) and Special Recreation Management Areas (SRMA) adjacent to park boundaries. The establishment of Parashant and Mt. Trumbull SRMA, and ACEC at Marble Canyon, Paria Plateau, Witch Pool, and Napmaweap are important for the protection of park values including remoteness and visual integrity. Alternative 3 is not overly restrictive because it provides for special stipulations to be set aside if local conditions warrant and adverse impacts can be mitigated. This alternative provides the best assurance that special resources concerns will be fully considered.

3) The locatable minerals scenario in Appendix 31 does not include a projection for acres of disturbance from development. Only disturbance from exploration is included. This is apparently an oversight, because further development of breccia pipe deposits is likely. 2

4) There is an apparent error in Appendix 11, the table showing the availability of lands for fluid minerals leasing. The total number of acres to be managed under Category C is listed as 137,800, while adding acreage under the discussion of Category C totals 404,400 acres. Other figures in this table may also be inaccurate. Otherwise, the information on fluid minerals availability presented in Appendices 9 through 12 appears to be accurate and useful. 3

5) The reclamation stipulations in Appendix 5 are an excellent inclusion. The statement that the stipulations will not be applied to all such actions should be strengthened by adding, "however, suitable site specific stipulations will be applied to each action in order to minimize long-term impacts and ensure that the site is effectively reclaimed." Stipulation number 6 can be improved by allowing some 4

02-06 (continued)

2. Projections for acres of disturbance resulting from locatable mineral resource development were included on page A-82 of the draft RMP/EIS.

3. The Appendix has been changed to reflect this comment.

4. Appendix 5 has been changed to reflect these concerns.

flexibility in the reclamation schedule so that planting or seeding can be done during the most appropriate season. Newly-reclaimed sites must be fenced to exclude livestock until perennial species become well-established and reproductive. It should be stipulated that BLM may require access roads to be located and designed to minimize erosion, dust, or impacts to cultural and visual resources, and wildlife habitat. 4

6) Reclamation stipulations should be expanded to include stipulations specific to oil and gas operations. Suggested additions to Appendix 5 include: 1) the removal of all pits and drilling muds, 2) removal and proper disposal of all oil contaminated soils, 3) production equipment must meet all minimum state standards for safety and environmental protection, and 4) maintenance or haul trucks should use mitigating measures such as spill-prevention equipment and appropriate schedules to avoid disturbing sensitive wildlife. 5

7) The potential noise-related influences of mining operations should be evaluated, specifically with respect to the range of noise from typical mining activities in an area such as the Kanab Plateau and the predicted influence on areas within parklands. This should also include evaluations of chronic vs. acute noise intrusions and the influence on wildlife including that on adjacent parklands. 6

8) With the management focus being preservation of natural backcountry characteristics and associated recreational values within SRMA's, it seems contradictory to continue mineral activities within designated SRMA's. Mineral activities create definite impacts which diminish backcountry characteristics and in most instances they require new roads. (A stated management objective for SRMA's was that new roads would not be allowed.)

B. Cultural Resources

1) No reference is cited for the prehistoric cultural chronology presented on page IV-11 and no archeological references are provided in the bibliography. What is the source of the term "Neo-Archaic A.D. 1200 - A.D. 1540"? It is not widely accepted theoretical usage, not in keeping with the state's archeological planning contexts, and is misleading in that it implies a change or reversion to a way of life that has not been substantiated archeologically. 7

2) The plan does not document consultation with the Arizona State Historic Preservation Officer (SHPO) as part of the compliance process. This consultation should also be requested to assess the management plan's compatibility with the State's cultural resources planning units as noted above. 8

3) We are concerned with one major weakness in the Appendix 13 on Cultural Resources Management Guidelines. This is the appropriate section to discuss the compliance process, regulatory mandates, and the evaluation process. However, there is no discussion of National Register criteria, how sites are determined to be significant, which sites are to be preserved or studied, etc. What are the decision 9

02-06 (continued)

5. Reclamation and operating requirements of Appendix 5 would apply to all resource use or development proposals as needed. The reclamation of drill sites is required by the current regulations and Onshore Oil and Gas Orders. Specific requirements for reclamation are addressed at the time of submission review and approval. The enforcement of state standards concerning safety and environmental protection is the responsibility of the respective state agency. BLM coordinates with the respective state agencies when reviewing applications for oil and gas exploration and development on federal lands. Lease stipulations limiting exploration operations to certain times of year were proposed in the draft RMP/EIS to protect sensitive wildlife species.

6. See text change, page IV-32 (impacts to adjoining lands).

7. Please refer to the amended Bibliography, page A-93 and page III-7. The term Neo-Archaic is used by archaeologists involved in current research on the Arizona Strip.

8. The Arizona State Historic Preservation Office personnel are consulted in the preparation of the RMP (page V-4).

9. The BLM's management as a federal agency is directed in cultural resource evaluation by the National Register of Historic Places eligibility criteria. To date, random sample has not been applied to any eligibility evaluation.

02-06 (continued)

4

making criteria? Is it BLM's internal site ranking system, the National Register, or is it assumed that a random sample of a particular site type includes all identified sites of that type regardless of integrity and/or other factors?

4) The Index lists other scoping issues and environmental concerns but does not list cultural resources. | 10

5) The Parashant is an area with high potential for discovery of significant cultural resources. We encourage cultural resource inventories within the area.

6) Grand Canyon National Park inventories document in excess of 170 cultural resource sites within the limited areas surveyed in the park (and there may be a similar density on BLM lands). Many areas remain unsurveyed and are pristine in both cultural and natural resource conditions. The wealth of cultural resources on the Kanab Plateau warrants zoning for stricter preservation/protection.

C. Management Zoning and Visitor Use

1) The discussion of impacts in the document should be expanded to include impacts to several large land holdings adjacent to BLM-administered lands covered in the plan, including the various park units, Kaibab National Forest, and the Kaibab Indian Reservation. Many management actions taken under this plan will certainly impact these resources, and these impacts should be considered when evaluating alternatives. One possible method of addressing these land holdings would be to include a special section in the Environmental Impact Statement entitled "Impacts To Non-BLM Lands Within and Adjacent To the District." | 11

2) The Kanab Plateau is an area with important resource values, remote in character, and significant in biological and resource diversity. We request that the BLM consider zoning the Kanab Plateau along the Grand Canyon National Park boundary as "Limited to Designated Roads and Trails", and possibly, as an "Area of Critical Environmental Concern". Resources on the Kanab Plateau within Grand Canyon National Park have been impacted as a result of past activities on adjoining lands. Many of these impacts can be eliminated or at least reduced through zoning for stricter control. This should reduce the potential for impacts stemming from sanctioned activities including "casual use". While law enforcement can be applicable as a mitigation tool, its use must rely on the limited numbers of personnel available to both BLM and NPS. Consequently, zoning with management restrictions, should prove to be a more effective method of resource protection. | 12

3) Visual resource classification is a major concern due to the spectacular scenic nature of much of the District. We question why most lands located adjacent to park units are not designated as class I areas? Many of these lands have scenic qualities which are directly viewed by park visitors. Also, a class I visual resource management classification would help protect these lands from potential future developments which might conflict with NPS policies and management objectives or park resources and values. | 13

02-06 (continued)

10. Please see Index page A-97 and the changes on page S-3.

11. The document now contains a section on impacts to adjoining lands (p. IV-30).

12. ACEC designations highlight areas where special management attention is needed to protect and prevent irreparable damage to important historic, cultural and scenic values, fish or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. ACECs must meet relevance and important criteria as outlined in 43 CFR 1610.7-2 before they are considered for designation. ACECs are not designated merely to provide a buffer to other areas such as wilderness or national park. The areas you have referred to as adjacent to the Grand Canyon National Park's northern boundary have been considered, but do not meet the ACEC criteria.

BLM has already coordinated and closed roads along the northern boundary of the Grand Canyon National Park.

13. Visual Resource Management Class I is, by definition, assigned only to areas which have a special designation such as Wilderness or Natural Areas. Class I objectives allow for only natural ecological changes. See Appendix 20 page A-67 for a more complete description about each class. Our visual inventories were used to define needed protection based on an area's own merits, scenery, views, and sensitivity.

4) The improved visitor services proposed under Alternatives 2 and 3 will be beneficial. These efforts should include information on National Park System and National Forest lands in the area, and the differing management of these lands. This information should help to reduce conflicts for recreationists and land managers caused by a lack of knowledge of boundaries and permitted activities.

D. Pest Management

1) We did not find references in the plan to integrated pest management (IPM) activities. It would seem appropriate to reference objectives for pest insect (such as grasshopper) control programs, general prescriptive restrictions for these programs, and individual project review procedures. As examples, prescriptive restrictions for grasshopper control could include no Malathion or other pesticide having potential impact on prey base or food chain within 10 miles of known or high potential habitat of endangered or threatened bird species, and no Malathion or other pesticide having potential ecosystem impacts (i.e., effects on pollinating species) within 3 miles of endangered plant populations. 14

2) It would be appropriate to involve the National Park Service in review of IPM activities on lands adjacent to its management units.

E. Water Resources

1) The plan should indicate how compliance with the State of Arizona's Non-point Source Water Quality Management Plan will affect grazing activities and thus watershed management. 15

2) The document states that appropriated water rights will be sought within state water law. The discussion of this action should be expanded to explicitly state that rights to instream flows will be sought to protect fish and wildlife habitat, and other resource values. Such an action was proposed in the recent draft Dixie Resource Area Resource Management Plan (Utah). 16

F. Wildlife Management

1) Several references are made to introduction of small game species in various areas under wildlife resource discussions. Specifically Table II-1 on page II-27 discusses introduction of the Kaibab squirrel into ponderosa pine habitat at Parashant under both Alternatives 2 and 3. In the lack of definitive evidence that Kaibab squirrels were ever native to the Parashant, National Park Service policies are clearly opposed to such an introduction into areas adjacent to the park where they are likely to become established in the park. We would propose a buffer zone to eliminate potential for any such introduction to establish the Kaibab squirrel in Lake Mead NRA. In any event, the NPS should be consulted as a technical committee participant prior to any such introductions. 17

02-06 (continued)

14. See Comment 04-13-19

    Pest management problems are "Activity Plan" level actions and are handled on a case-by-case basis through the environmental analysis process that includes tiering to the programmatic EIS prepared by USDI and APHIS. This process involves a consideration of all suggested mitigation and restrictions and a public review that includes interagency coordination.

15. The BLM is working with ADEQ to develop a state handbook of Best Management Practices for livestock grazing on Arizona's rangelands. The handbook will address grazing activities and watershed management. These will be incorporated into activity level plans that will have public review.

16. Since issuing the Draft RMP/EIS, BLM has filed for instream flows on the full length of the Virgin River within Arizona, including Beaver Dam Creek at its confluence with the Virgin River. An instream flow study to quantify needs started in the fall of 1990. On-going data collection was initiated in the spring of 1989 on both streams. The purpose of the instream flow rights is to protect fish and wildlife habitat and all other multiple use resource values. Other streams may be evaluated for their needs for instream flow water rights.

17. See text change Table II-1, page II-27. Kaibab squirrel would not be transplanted in the Parashant area unless it is demonstrated that they once inhabited the area. Any implementation of a transplant of Kaibab squirrels into areas where they do not presently occur, would require development of a plan and review of the proposed action by all concerned parties. The National Park Service would be consulted concerning any transplants into the Parashant.

02-06 (continued)

2) Map III-15 on page III-55 designates portions of Lake Mead NRA as either "critical" or "non-critical" burro habitat. We would like to note that there is no authority for designation by the BLM of any NPS lands as burro management nor any other management priority area. | 18

3) Table S-7 on page S-15 states, under Alternative 3 that SRMA designation could increase visitor use and have negative impacts on wildlife. We feel that other designations available, all less restrictive to multiple uses than SRMA's, will have greater direct habitat impacts through land disturbances, and also create more roads which will create greater impacts to wildlife than SRMA designations. | 19

G. Grazing

1) We recommend that the plan include a discussion of the monitoring method used for the range utilization analysis and future utilization monitoring. Will the Potential Natural Community system be used? | 20

2) In Appendix 2, the Vermillion Resource Area table for "Rangeland Trend/Utilization as of 1988" should include the following allotments in Glen Canyon National Recreation Area: | 21

- Blue Pools, Utah
- Ferry Swale, Utah
- Wahweap, Arizona

3) There are discussions under Alternatives 2 and 3 concerning holding the Parashant grazing allotment, currently closed to grazing, as an emergency use or rotation area. We consider that portion of the Parashant allotment within the Lake Mead NRA as closed to grazing, and will not authorize any new licenses for that area. | 22

H. Other

1) It would be appropriate to reference stand replacement (regrowth) assumptions and research for the areas proposed for timber harvesting; also, list the harvest acreage targets and any management assumptions for sustaining harvest and regrowth. | 23

2) We recommend additional monitoring programs to assure attainment of management objectives outlined in the plan. Examples of appropriate monitoring programs: vegetation analysis (number of acres or allotments evaluated per year); visitor impact (cyclic) inventory/analysis for cultural sites (sites per year); trail standards/condition inventory (miles or trails/year); and, fence condition monitoring (miles per year). | 24

02-06 (continued)

18. The reference of concern regarding designation of burro habitat has been deleted.

19. The designation of a Special Recreation Management Area would logically be expected to increase visitor use which would in turn result in increased human activity that adversely affects wildlife. Other types of designations such as Resource Conservation Areas would also involve some possible adverse impacts on wildlife, dependent on the multiple use management programs implemented. It is difficult to determine which type of designation would most impact wildlife until specific management programs are developed for the areas and the environmental impacts analyzed.

20. Appendix 4 contains a resource monitoring and evaluation plan (pages A-9 to A-12). The approved RMP will contain a detailed monitoring plan. Inclusion of the "Potential Natural Community System" will be considered.

21. The Blue Pools and Ferry Swale Allotments will have monitoring studies when an AMP is developed for the allotment. This will occur in the early 1990s. Wahweap allotment is in a custodial status and not slated for a management plan. See Custodial description on Appendix 3.

22. The only portion of the Parashant allotment to be used for emergency grazing use is the BLM administered portion.

23. These comments imply that a commercial forestry or timber management program is involved. Incorporation of the suggestions is not appropriate since the ponderosa pine forests are designated as Category C and will be managed for the enhancement of other uses rather than on commercial forestry or timber management and harvest.

24. Appendix 4 outlines a general monitoring plan for the RMP. More detailed procedures will be developed in the approved plan and in activity plans.

3) We suggest that Pipe Spring National Monument be shown on the large map located in the map pocket. | 25

4) During the preliminary scoping for this plan, the Page, Arizona, landfill site on public lands west of Glen Canyon National Recreation area was discussed. We note that this landfill was not mentioned in this draft. It is our understanding that any changes to the present landfill would require additional environmental compliance. | 26

5) We commend the Arizona Strip District for their conscientious review of streams in their district for potential wild and scenic river designation. We concur with their accurate and concise findings regarding the Virgin and Paria Rivers.

We appreciate the opportunity to review and comment upon this plan. Our contacts for questions or further information on the above comments are:

Rocky Mountain Regional Office:
Michael Duwe - (303-969-2830)

Western Regional Office:
Jim Huddlestun - (415) 556-8313

Grand Canyon National Park:
Jerry Mitchell (602) 638-7753

Lake Mead National Recreation Area:
Kent Turner (702) 293-8935

Sincerely,

cc:
Regional Director, Rocky Mountain Region
Superintendent, Grand Canyon National Park
Superintendent, Lake Mead National Recreation Area
Chief, Branch of Interagency Archeological Services, Western Region
Chief, Environmental Quality Division, National Park Service

02-06 (continued)

25. See change on map located in map pocket.

26. This is an activity plan level action and was not included in the RMP. However, additional environmental compliance work will be completed if the present landfill is moved or substantially alters its present procedures.

Northern Arizona
Council of Governments

POST OFFICE BOX 57 • 119 EAST ASPEN AVENUE • FLAGSTAFF, ARIZONA 86002 • (602) 774-1895

KENNETH J. SWEET
EXECUTIVE DIRECTOR

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

March 5, 1990

Dear Mr. Curtis:

We received a copy of the Draft Arizona Strip District Resource Management Plan and Environmental Impact Statement from the Arizona State Clearinghouse and were surprised to see that neither the Northern Arizona Council of Governments nor the Western Arizona Council of Governments were on the list of agencies you had consulted during development of the EIS. We also noted that, from the list of agencies on page V-4, you may not have contacted the Arizona Department of Environmental Quality. We believe that these agencies need to be added to the list of agencies with whom you make contact regarding this EIS so that they can respond from their persoectives. 1

After reviewing the document, we have the following comments:

1. According the the Arizona Department of Envoronmental Quality Non-Point Source Assessment, evaluated data from USFS information for the Strip area shows sedimentation and turbidity from grazing activities; however, "specific data from BLM about grazing impacts on water quality (are) generally lacking". On page III-14, your report states "Over 36 percent of the district is in category IV, unsatisfactory erosion condition, ...". Watershed activity needs have been identified by the BLM, however, due to lack of funding, many watershed activity plans have not yet been written. We are concerned about the potential impacts of this erosion on water quality in the Colorado River and its tributaries and urge the BLM to complete these activity plans and to accelerate measures to mitigate the erosion from these areas. 2

2. Page III-32 lists over 5200 miles of unpaved and 4-wheel drive roads. We believe that both the present and the projected use of these roads poses a significant impact to air quality in the area, yet on page IV-6 your report states "Fugitive dust is not considered a pollutant subject to federal or state regulations" and the agency is apparently not planning to take any measures to prevent the increase of this pollutant as future use increases. We urge the BLM to take a more aggressive stance in this regard and to possibly identify the present and future higher volume roads and trails in the area which contribute large quantities of fugutive dust so that possible mitigating measures can be identified and evaluated. 3

03-01

1. The Northern Arizona Council of Governments, the Western Arizona Council of Governments and the Arizona Department of Environmental Quality have been added to our mailing list.

2. The Vermillion and Shivwits Livestock Grazing Environmental Statements of 1979 and 1980 discuss grazing impacts to all resources.

3. Fugitive dust from roads is a localized situation dependent upon the number, weight and speed of vehicles, number of wheels, silt and moisture content of the road surface and wind speed. Modeling, using the Industrial Source Complex (ISC) dispersion equation, was done in mine site EAs to assess the effect of ore hauling on roads leading from uranium mines. Dust clouds are of short duration due to setting velocities which cause deposition of most particulate within a few hundred meters of the roads for TSP concentrations and deposition of most PM10 particulate within one to two thousand meters. All modeling calculations showed that maximum TSP and PM10 concentrations for long-term (annual) and short-term (24 hour) periods were well below EPA particulate standards. Again, we must stress that fugitive dusts are not subject to state or federal regulations. The various mine site EAs are available for review in the district office.

   A study of road use is presently underway. When enough data is available for accurate ranges of use, an analysis of use and fugitive dust will be made. Appropriate mitigating measures will be initiated, but the driving forces for action will likely be visual concerns and/or degradation of the road base rather than air quality.

03-01 (continued)

Draft RMP/EIS for Arizona Strip 3/5/90

We appreciate the opportunity to comment on this draft Resource Management Plan/Environmental Impact Statement and look forward to additional communications with your agency.

If you have any questions or comments, please call me.

Sincerely,

Joe Weidman

Joe Weidman
Planning and Human Services Director

c: Bill Riley, WACOG

03-02

JOHN R. SWANSON
3800 Edmund Blvd.
Minneapolis, MN 55406

March 9, 1990.

Bureau of Land Management
390 N. 3rd East
St. George, Utah 84770.

Dear Sirs;

Please accept my Comments, as follows, concerning the Draft Environmental Impact Statement Resource Management Plan; Arizona Strip District - Bureau of Land Management.

The Arizona Strip District contains outstanding wilderness, wildlife, biological, cultural and scenic resources - certain national significance. As this District presents unique, varied and very fragile natural attributes that fully deserve Man, and all life, on this endangered planet.

Therefore, I urge that this Arizona Strip District be dedicated (primarily) as the Arizona Strip Wilderness - Bureau of Land Management Areas - and to include (at least) 2,120,000 acres in our National Wilderness Preservation System.

And to further dedicate this District's 822 Areas - as the Shivwits - Virgin River National Park w/ some 2,550,000 acres - with a Wilderness to include (at least) 2,320,000 acres.

For when we save our Natural Lands, we Save America!

Sincerely,
John R. Swanson.

3/13/90

Clayton Atkin Comments

1- Very concerned about potential buffer zones around the Park

2- Concerned about OHV designations. How will it impact livestock grazing. Range users needed

3- Would like to see Visual Resource Management defined — what does recommendation mean 1

4- Feels we need to recognize the fact that the range looks better now, than it has for many years — It needs to be recognized a valid existing use — strengthen it.
c) Don't reopen the issue.

5- ~~Scenic~~ Back country byways need to be used to inform people about the various multiple uses. Don't duplicate a NPS experience and emphasize natural scenery. Emphasize the multiple uses and the advantages of this type of management.

6- Support RCA's as multiple use areas — No undo emphasis on recreation.

Clayton Atkin

1. See text change, Appendix 20, page A-67.

03-03

03-04

United States Department of the Interior

NATIONAL PARK SERVICE

LAKE MEAD NATIONAL RECREATION AREA

601 Nevada Highway

BOULDER CITY, NEVADA 89005

IN REPLY REFER TO:
L7619(LAME-R)

March 12, 1990

Memorandum

To: District Manager, Arizona Strip District, Bureau of Land Management

From: Superintendent, Lake Mead National Recreation Area

Subject: Draft Resource Management Plan for the Arizona Strip District

We appreciate the opportunity to meet with George Cropper and Dennis Curtis to discuss the draft Resource Management Plan for the Arizona Strip District. The following are comments which we discussed with them as we worked through the plan.

Generally, we feel that we share similar management philosophies and objectives for the area. Our objectives are to maintain the remote character and back-country experience opportunities now available. Our current management posture calls for leaving National Park Service lands undeveloped. If use increases to necessitate it in the future, we may have to designate primitive camping areas (no facilities) and a permit system, but there is no planning at the present time to do so. We encourage use of the Special Recreation Management Area designation for Bureau of Land Management lands adjacent to National Park Service Lands to emphasize recreational opportunities of the area.

We would like to work with you in development of joint management plans to encourage the continuing use of this area as a discovery and backcountry experience. Particularly, we feel we should jointly develop standards and objectives for the concession and commercial tour proposals for the area. Perhaps we could develop joint planning untilizing a concept such as "Limits of Acceptable Change" to provide a basis for appropriate.recreational opportunities and facilities.

Specifically, there are discussions under Alternatives 2 and 3 concerning holding the Parashant grazing allotment, currently closed to grazing, as an emergency use or rotation area. We consider that portion of the Parashant allotment within Lake Mead National Recreation Area as closed to grazing, and would prefer not to authorize any new permits or licenses for that area. We would like to have the Lake Mead portion removed from the Parashant allotment. | 1

In related range management matters, we request that the practice of chaining and planting grasses for range improvement not be conducted adjacent to the | 2

V-39

1. Cattle grazing on the Lake Mead National Recreation area's portion of the Parashant allotment will remain closed to grazing as it has been since the mid-1980s.

2. The land treatment policy of the BLM is to do land treatment where environmentally and economically sound. Native plants are seeded when available and economical. Studies on the Arizona Strip demonstrate there has been no

03-04 (continued)

2

recreation area boundary, as we have management and policy concerns relating to potential spread of exotic grass species. Similarly, for aesthetic and biological reasons, we would prefer that no timber clearing occur immediately adjacent to the boundary. | 2

Map III-15, Page III-55, designates portions of Lake Mead National Recreation Area as either "critical" or "non-critical" burro habitat. Since there is no authority for the designation by the Bureau of Land Management of any National Park Service lands as to burro management habitat, we would like those designations to be deleted. | 3

Several references are made to introduction of small game species in various areas under wildlife resource discussions. Specifically, Table II-1, Page II-27, discusses introduction of the Kaibab squirrel into ponderosa pine habitat at Parashant under both Alternatives 2 and 3. With the lack of definitive evidence that Kaibab squirrels were ever native to the Parashant, National Park Service policies are clearly opposed to such an introduction in to areas within the recreation area, or in areas where they are likely to migrate into and become established within the park. We would propose a buffer zone to eliminate potential for any such introduction to establish the Kaibab squirrel in Lake Mead National Recreation Area; in any event, we would like to be consulted as a technical committee participant prior to any introductions. | 4

The Visual Resource Management Alternative 2 map (preferred), Page II-77, shows class 2 or class 1 areas listed along the majority of our boundary, with some exceptions in the Andrus and Parashant Canyon areas. Viewsheds are an important component of National Park Service resources and objectives and we would prefer to see a designation of class 1 or 2 along the entire boundary.

The map of Off-highway Vehicle Designations Alternative 2 (preferred, Page II-73, shows a proposed designation of "limited to designated roads and trails" for the majority of the recreation area boundary except for the Andrus and Parashant Canyon areas and the Yellow John Mountain area. As we manage off-highway vehicles under regulations similar to your "limited to designated roads and trails," we feel it would be less confusing to the visitor and more managerially consistent to extend that designation along the entire boundary. | 5

National Park Service Considerations

As discussed at our meeting, we encourage your intended development of more detailed information concerning the impacts of your porposed management upon units of the National Park System. As mentioned before, viewsheds are an important resource; therefore, we would prefer that special designations such as Resource Conservation Areas, or preferably, Special Recreation Management Areas, be made to the extent possible adjacent to the recreation area boundary. | 6

03-04 (continued)

problem with exotic seeded grasses spreading. It is very difficult to maintain the exotic grasses. They generally are crowded out by native species to the point that after 25-40 years the exotic grasses are non-existent. No clear cutting of timber is planned.

3. See response 02-06-18

4. See response 02-06-17.

5. The plateau between Andrus and Parashant Canyon weren't included in the "limited to designated roads and trails" designation because the terrain and limited resource values in the area didn't warrant closing off the area. BLM will coordinate its transportation plan with Lake Mead NRA to complement their designation system.

6. See the new section in Chapter IV "Impacts to Adjoining Lands" for an analysis of proposed management impacts to the National Park system.

03-04 (continued)

The proposed introduction of small game species is another subject which could impact National Park Service areas. Any proposed wildlife introductions adjacent to National Park Service areas should include a detailed analysis of potential impacts or dispersals into National Park Service areas.

We appreciate the opportunity to discuss your draft Resource Mangement Plan and your interest in our concerns. We look forward to working with you in cooperative management of the unique resources and recreational opportunities of the Arizona Strip.

Alan O'Neill

Alan O'Neill

03-05

Gardwood, Alaska
March 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District

Dear Mr. Curtis:

Thank you for sending me a copy of the draft Resource Management Plan/ Environmental Impact Statement for the Arizona Strip. Of the four Management Alternatives you propose, I am most in favor of Alternative 3.

However, I think that the Arizona Strip offers a unique opportunity to create a large Wilderness area to be managed in a state close to that which existed before the arrival of the white settlers. Over the 15 year life of the Management Plan all livestock grazing should be phased out and all mining and gas/oil exploration and development brought to a close. At the end of the Mangement Plan cycle all ~~mankind~~ non-paved roads and airstrips would be closed and rehabilitated and all vehicular access would be prohibited. Management practices would be geared to establishing a natural self-regulating wilderness ecosystem.

Sincerely yours,

Jo Motter

P.S. I read a few comments in the RMP that local opinion would be against more wilderness preservation. Please consider the fact that I am a native of St. George and come from a family background of livestock raising. Jo

D. Curtis
BLM-Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

March 5, 1990

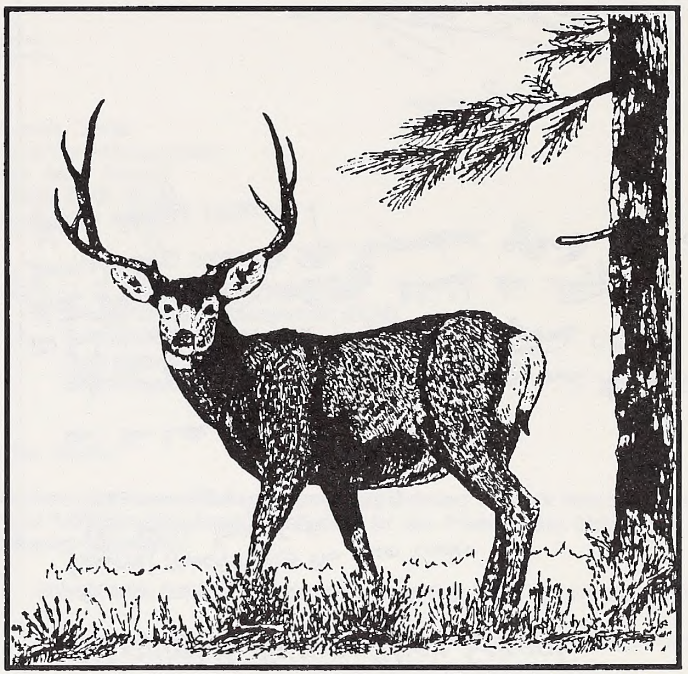
Enclosed are my comments on the Arizona Strip RMP-EIS dated Nov. 1989. I support most of Alternative 3 for the Arizona Strip RMP-EIS. Suggested changes include:

--acreage transfer of mineral land should be reduced even more (leas than 5000 acres).
--stricter regs on all ripsrian areas--less or no bovine use should be emphasized.
--increased visitation use should be discouraged in all areas of the Arizona Strip. Increased recrestional visitatiion has a negative impact on the wildlife, land, and other resources.
--No new roads or improvements of any kind anywhere for any reasons. Just leave all rosds as is. Some areas should be reatricted-especially to ruthless ORV use. ORV's should be banned on the AZ Strip-such aa qusdrunners, 3--wheelers, and motorcycles, dune buggies, and other abusive machines to the delicate landacape.
--historical and archeological sites (including sensitive and pristine sites) should not be "flagged" for public visitation or use. No signs or maps, pleaae! Desecration of these sites is a aerious problem--especially with the growing populations of the St. George area.
--No expanded or improved visitor services. It means leaa use and abuse to the Strip!
--Why was the SCS aoila info not included in the RMP-EIS? Most of the Strip has been soil mapped by the SCS. 1
--All special status animal species ahould be given top priority to their apecies preservation.
--ALL ORV use on the Strip eapecially juat south of St. George should be banned and strictly enforced. These delicate clay hills (Chinle Formation) where the rare white poppy grows should be preserved from the permananent damage and scarring of wheeled vehiclea. Gypsum and other mining in the area should be banned or strictly monitored.
--Right-of-way corridora should be further reduced to ¼ mile or less. Ideally, No more powerlines should be allowed to be built across the Strip anywhere.

03-06

1. The SCS soils information is regarded as part of the Management Situation Analysis (MSA), not the RMP. When data for the Vermillion and Shivwits Resource Area is complete it will be incorporated by reference into the MSA (see page I-3 for the relationship of the MSA to the RMP).

--stop all hunting the Kaibab Squirrel, Merriam's Turkey, Desert Bighorn Sheep, and "non-game animals".
--all spring and seeps, etc. should be fenced (around source) to keep out sloppy users such as bovines and wild burros. Their manure/urine contamination habits need to be strongly considered. The bottom and top wires should be barbless for the deer and antelope to safely access.
--no surface occupancy should be allowed anywhere on The Strip.
--no future communication sites should be allowed anywhere on The Strip including Seegmiller Mtn.
--land ownership adjustments (exchanges or sale) should be further reduced from 15,010 acres to less than 5000 acres. None would be OK too. This is primarily around growing communities.
--Commercial harvesting practices should be abolished. This includes all types of trees and other vegetation.
--all mineral and oil exploration and explotation should be stopped or strongly curtailed. Mining companies do too much damage when they come in & scar the land and environment.
--Alternative 3 is OK-but is still insufficient protection for The Arizons Strip and the wildlife there. The Arizona Strip is one of the last, most remote, pristine, and least populated areas of the West. It must remain that way for many many years to come. It is a special place to us who know almost every square inch of The Arizona Strip!!



Sincerely,
E.A. Artemesia
E.A. Artemesia
Wolfhole, Arizona

03-07

Memorial Conservation Club

Memorial Junior High School

Debra Gershow
Faculty Advisor
Brian Straigis
President
Eric Fabiano
Vice-President
Tara Jacobs
Secretary
Nicole Bellone
Treasurer
Joe Gusmer
Public Relations

Dennis Curtis
Regional Management Plan Team Leader
Bureau of Land Management
390 North 3050 E. ST. George
Utah 84770

Dear MR. Curtis,

I've just read an article on what you're doing to river, wildlife, & human even. I am very concerned for the liver that you are putting to risk. I just hope that you will quit mining. Remember you're also hurting your life!!

Thank You

From,
Jeremy LaMonaca
1072 Millburn Rd
Valley Stream N.Y. 11580

03-08

Memorial Conservation Club

Memorial Junior High School

Debra Gershow
Faculty Advisor
Brian Straigis
President
Eric Fabiano
Vice-President
Tara Jacobs
Secretary
Nicole Bellone
Treasurer
Joe Gusmer
Public Relations

Dennis Curtis
Regional Management Plan Team Leader
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis,

I am very concerned about the wildlife and the environment in and around the Grand Canyon in Arizona. I feel strongly that the uranium mining should be stopped immediately due to the hazardous effects. Thanks You very much!

Sincerely,

(Eric Fabiano)

Memorial Conservation Club

Memorial Junior High School

Debra Gershow
Faculty Advisor

Brian Straigis
President

Eric Fabiano
Vice-President

Tara Jacobs
Secretary

Nicole Bellone
Treasurer

Joe Gusner
Public Relations

Dennis curtis
Regional management Plan team leader
390 north 3050 East
St. George, Utah 84770

Dear mr curtis, I read an article about the uranium mining threatens arizona's wildlands. I am very concern about the animals and the people who have to breathe in the air that you ~~are~~ are polluting. They also have to drink the dirty watter. I would ask you can you please stop you mining.

~~Thanks to you~~

Thanks you
Jimmy Jacobs

33 lois place
valley Stream N.Y
11580

Fletcher Avenue • Valley Stream N.Y. • 11580

Southern California Edison Company
P. O. BOX 800
ROSEMEAD, CALIFORNIA 91770

March 21, 1990

REAL PROPERTIES AND
ADMINISTRATIVE SERVICES

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

SUBJECT: U. S. Department of the Interior
Bureau of Land Management (BLM)
Arizona Strip District
Draft Resource Management Plan and
Environmental Impact Statement

Dear Mr. Curtis:

The Southern California Edison Company has reviewed the Draft Resource Management Plan and Environmental Impact Statement for the Arizona Strip District and submits the following comments:

- Edison does not have transmission lines that cross the Arizona Strip District.
- Ongoing generating siting studies do not identify future resources in this area.
- Additionally, Edison does not, at this time, have any plans to build new lines along the Arizona Strip District. Should the need arise, however, the proposed plan does not restrict the use of this area.

If you have any questions regarding the foregoing comments, please contact Art Cheng at (818) 302-6204.

Sincerely,

D. F. BAUMANN
Supervising Real Properties Agent

AC:smg:19

03-11

March 22, 1990

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis,

Please include the following comments in the record for the draft Arizona Strip District Resource Management Plan and Environmental Impact Statement.

I am impressed with the draft RMP's recognition of non-commodity values and the proposals to protect them. I am especially happy to see that you consider cultural resources to be a planning issue since these irreplaceable values are affected by all activities on Public Lands. My comments are separated into general categories that combine several areas of the RMP and EIS:

1. Summary:

Table S-5 on p.S-10 has incorrect figures under Alternative 3. I assume the information in Section 2 is correct. The following comments are based on the information in Section 2. | 1

2. Management Guidelines (pp. II-2,3):

The ORV designations should not restrict the "Limited to Designated Roads and Trails" stipulation to Area B lands. To increase management flexibility, this designation should also be used in Area A where sensitive values such as cultural resources are present and need to be protected from ORV impacts. After all, the "existing" roads can all be "designated" roads if no damage to other resources is taking place. Since Alternative 3 would place more land in Area B classification, there are obviously sensitive resource values outside Area A as proposed in Alternative 2, and these values need the protection of a "Limited to Designated Roads and Trails" ORV designation.

I strongly support the Area B proposal to "close and rehabilitate roads where no public or administrative need exists". However, this proposal should not be limited to Area B. Unnecessary roads in Area A should receive the same treatment.

3. Cultural Resources:

None of the Alternatives (pp. II-4 to 7) address the main planning issue for cultural resource management - what the response will be to impacts on cultural resources from both authorized and unauthorized actions. These impacts include natural erosion, human erosion, ORV impacts, vandalism, damage from mineral explo-

1. The change has been noted.

ration, damage from grazing, damage from road maintenance, and unintentional damage from approved projects. The statement: "Other areas would continue to be managed under current laws and policy" is too vague. What will be done if an ORV trail is found to be impacting a archaeological site in any part of the District? What will be done if archaeological sites are impacted by an approved BLM project because they were not recorded during the clearance? What type of salvage will be done? If the RMP doesn't include a list of responses that will apply if cultural resources are impacted, then you are not treating cultural resources as a planning issue. As an example, I was camping in the Mt. Trumbull area a few weeks ago in a well used campsite adjacent to the road. The campsite was in the middle of an archaeological site that was also impacted by the road. In addition to a large number of flakes and some pottery, the site included a circular rock feature. Many of the rocks had been removed from this "structure" to make a fireplace. The RMP should state what the BLM will do about this problem and others like it. The Cultural Resource Management Guidelines in Appendix 13 do not address the issues of what to do about existing or new impacts to archaeological sites. 2 3

Since only a small portion of the District has been surveyed for cultural resources, the RMP should include a proposed schedule for surveying additional areas, especially in areas where there are conflicts with other values such as recreation or minerals.

An additional cultural resource issue is land disposal. The final RMP should state that no BLM land will be disposed of unless there is a 100% cultural resource clearance and all archaeological sites are "mitigated".

4. Right-of-Way Corridors:

I object to the designation of a one mile wide utility corridor through the District. The 2000' wide corridor through the Vermillion Resource Area is adequate and this width should be used in the Shivwits Resource Area also. The wider corridor just spreads out the visual impacts from power lines.

5. ORV Stipulations:

I approve of your proposal to limit the "open" ORV area. ORVs are causing incredible impacts to cultural resources and other sensitive resources and it is long past time for the BLM to recognize this and do something about it. The BLM needs to be able to control these impacts and the best way is to increase the area that is "limited to designated roads and trails" at least to those areas shown in the Alternative 3 ORV stipulations. This will allow management flexibility that is not available with the "limited to existing roads and trails" designation. I hope that in the final RMP, you will extend the "limited to designated roads and trails" classification to sensitive places in Area A in addition to Area B.

03-11 (continued)

2. Response to authorized and unauthorized actions is not a planning issue but is mandated by Federal law, regulation and BLM policy. Please refer to Appendix 10 which includes subparts of relevant regulations; or refer to documents specified. Cultural clearance inventories are conducted to identify all cultural properties potentially eligible for nomination to the National Register of Historic Places. Cultural properties not identified in surface surveys are protected by stipulations in National Environmental Policy Act documentation. Mitigation of cultural properties to avoid adverse effects on cultural properties are developed through a research design approved by the SHPO. Every cultural property that is impacted by a federal authorized or initiated action is subject to the National Historic Preservation Act and the regulations pursuant to that law. Please refer to the amended Appendix 10 for the evaluation of cultural resources used in the planning process.

3. Many areas of the Arizona Strip District have been developed as recreation areas (campsites) by casual public use before the environmental protection legislation. BLM in the future will include in recreation publications, the familiar rule, "Do Not Camp on an Archaeological Site". Individuals should not knowingly disturb an archaeological site.

6. ACEC Stipulations:

The ACEC Stipulations in Alternative 2 (Preferred Alternative) are inadequate to protect the special values in the ACECs. The final RMP should include the stipulations from Alternative 3 for all ACECs to provide additional protection for the resource values that the ACECs are supposed to protect.

Conclusions:

While the layout of the draft RMP is somewhat confusing, the information presented is adequate to allow the public to understand all of the proposed alternatives. Overall, the draft RMP provides an excellent framework for evaluating the various resource values that exist on the Arizona Strip District and the levels of resource protection that are proposed. Unfortunately, Alternative 2 (Preferred Alternative) does not do an adequate job of protecting the abundant non-commodity values that are present on the District. The preferred alternative should include the ACEC designations and stipulations from Alternative 3 as well as the ORV travel designations from Alternative 3. Since recreational uses of the District are becoming more important all of the time, the Visual Resource Management classifications from Alternative 3 should also be included in the final RMP's preferred alternative. Cultural resource management is a problem everywhere on federal lands, so the RMP needs to be more specific as to how cultural resource values will be protected and how impacts to archaeological sites will be handled. 4

Although there are problems with the draft RMP, it is years ahead of any RMP that has been proposed for BLM land in Utah. I commend you for your acceptance of the increased importance that the public places on non-commodity values on BLM lands.

Sincerely,

Owen Severance
P.O. Box 1015
Monticello, UT 84535

03-11 (continued)

4. After the RMP is completed, detailed activity plans will be prepared for each ACEC, plus cultural resource management plans will be prepared for other areas. Please refer to response 03-11-02 for how BLM will handle adverse impacts to cultural resources.

March 26

Dennis Curtis
BLM, AZ Strip Dist.
St. George, Utah

Following are my comments of a general nature concerning the DRMP for Arizona Strip. The scope of this document is large and I commend you and staff for including integral issues of the lands. My preference is for Alt. 3, one which seems to highlight non-consumptive resources. I have some ideas that recreation and the preservation of wide open space will be a priority on our public lands in the coming decades. The pressure will then be on BLM to adjust commodity uses to allow for ever-increasing recreations featuring relatively intact ecosystems.

My largest concern within the DRMP is with the mining and further exploration for uranium. This is a serious business with the possibility of down-canyon contamination, hauling accidents, and increased air pollution from road dust. I feel an encompassing EIS on uranium mining on the District would be in order with the affected environment of surrounding Wilderness and de facto Wilderness, National Parks, NRA's, etc. The flood of Hack Canyon is a good example of behavior I would like to see considered in a uranium mining EIS. 1

• Consideration of wood cutting, thinning, or harvest of Ponderosa Pine in the few remaining acres of forest on the Strip seems superfluous. What with the minimal acreage of tall trees around Trumbull, Parashant, and Black Rock Mtn., I do not see the logic in any silvicultural "management". Leave some wood for the shade, the diversity of plant and animals. This is no Sylvan Rhelm - it's in the middle of 1000^{s} of $miles^{2}$ of waterless desert and no place to be pulling and pruning trees for productivity. 2

My appreciation goes to your efforts to identify and protect Archaeologically and Biologically sensitive areas. The document goes a long way in addressing the issues nominally avoided by other Colorado Plateau Districts.

Bruce Chesler
Kanarraville, Ut

V-49

1. Based on environmental assessments (EAs) prepared for mining plans in the Arizona Strip District, the BLM has concluded that no significant adverse impacts to the environment would occur and that a separate EIS addressing uranium mineral development is not needed. These EAs include analyses of cumulative effects of exploration and mining and required mitigation measures and reclamation actions. None of these analyses show that contamination of any kind has affected any lands administered by the National Park Service or would affect these lands. Possible hauling accidents involving the spill of ore on the public lands are addressed in the company mining plans and EAs prepared by the BLM. Mitigation requiring immediate action to clean up any spilled material and the immediate notification of BLM is required in the approved mine plan. The Mt. Trumbull road is expected to continue to provide primary access to any operating uranium mines in the near future. Mitigation incorporated into the approved mine plans requires the company to provide a bus to transport employees to the mine site, thus reducing the creation of dust along the road. The Mt. Trumbull road is regularly maintained by Mohave County, thus reducing fugitive dust from all vehicles. With regard to the flood in Hack Canyon, all of the low grade ore which was affected was cleaned up immediately. A requirement for diversion ditches designed to withstand a 100-year, 24 hour event in all subsequent mine plan approvals was developed. In addition, surface runoff from the mine must drain to lined pits that will contain all water from mining operations and surface drainage resulting from a 100-year, 24 hour storm event.

2. See General Response to public comments page V-9.

03-12

Dear Bill,

Thanks for the extra time to respond to your Resource Management Plan. It is a massive document and difficult to absorb the often complex subject matter. The BLM has made a good faith effort to produce a commendable analysis of the future direction needed in order to protect the myriad resources of the Arizona Strip. I am in agreement with the vast majority of your conclusions, but as is to be expected with a such an all-encompassing plan, there are several aspects with which I have some concern.

I will try and follow the plan's format in chronological order as I present my concerns, rather than prioritize or jump from one issue to the next. This will make my concerns easier to follow, but there will undoubtedly be some overlapping and redundancy. Please try and be patient with me.

Let me begin by saying that I support Alternative #3, due to its stronger emphasis on the environmental approach. In most instances, however, there isn't that much difference between this alternative and your Preferred Alternative, so it's not a major point of contention.

I live, work, and recreate near the Paria Plateau and I feel that this area should be included as an ACEC, rather than a RMA. I feel that the Paria Plateau undeniably warrants this special protection. The Paria was once home to over 50,000 Anasazi and their pithouses and pueblos litter the plateau. This area was partially surveyed in 1968 by MNA and it was determined that there were approximately 6 sites per square mile across a 67-section study area. Many medium to large pueblos were found, some possibly worthy of inclusion on the National Register of Historic Places. Pithouses from Basketmaker times are numerous, as are cliff overhangs that were occupied as habitation sites or used as granaries. The Paria Plateau is without a doubt one of the most significant archaeological areas in the entire southwest. I would refer you to page III-11, under the heading of Important Prehistoric Cultural Resource Areas, paragraph #2, in which you make the perfect case for the undeniable significance of the Paria as a major study area. And there is much research work that must one day take place there--if there's anything left to record, that is. Systematic vandalism has occurred on the Paria over the years, and given the isolated nature of the area it is impossible for the BLM to police the resource. Jennifer Jack used to camp out up there on her weekends, trying to protect the prehistoric ruins! The bottom line here is this: the Paria is <u>not</u> a valuable location for grazing or mining, however it <u>is</u> one of the most outstanding archaeological areas on the Arizona Strip. The impact on local economies of this move to ACEC designation would be minimal. The loss of grazing revenues and taxes obtained from mineral development would be offset by the additional recreational dollars. The Paria should be afforded as much protection as possible so that the prehistoric sites are not looted. Another justification for the ACEC designation would be the existence of endangered cacti. I have seen pedio cactus on the Paria, and the restriction of OHV use would seem imperative in light of this fact. I have also seen Perigrine falcons nesting in the western cliffs of the plateau and these birds would benefit from the additional protection. I would also point out the curious

1

03-13

1. We agree that the cultural resources on the Paria Plateau are of significance that warrants special attention. Our District Advisory Council made the following resolution affecting our ACEC considerations: "The council recommends that the Arizona Strip BLM should carefully review all of the ACEC recommendations to ascertain whether it would be advisable to call public attention to each of these sites, or whether it would be in the best interest of protecting the special cultural or natural resource values to merely implement protective management stipulations for any of these areas without the attention getting ACEC label." Based on the resolution and consideration of all the resources in the area, we concluded the cultural resources would best be addressed in a Resource Conservation Area (RCA) designation which would have the same management prescriptions without the attention-getting name. This would also be consistent with the proposed RCA designation for Mt. Trumbull, another large area important for cultural resource values.

   To date, we have not seen the endangered pediocactus species on the plateau. We have been advised that an endangered milkweed inhabits the area, but this has not yet been confirmed by our monitoring.

   In the draft RMP, no ACEC was proposed for the Paria Plateau in the preferred alternative to avoid calling attention to the area.

inconsistency that the Paria Plateau falls under the category of an ACEC even under the development alternative. Why not under the PA?

The grazing issue is a major problem. First of all, it appears that you are in violation of NEPA, due to the fact that there is no difference between alternatives when it comes to grazing percentages. Grazing is apparently untouchable and the levels remain the same regardless of the management emphasis. That is not the way an RMP is supposed to work, and courts who have ruled on Forest Service LMP's have clearly stated that it is not enough to simply have the differences exist between certain management areas. My point is this: the overall levels remain the same, and that is illegal when preparing this type of document. Secondly, the levels continue to increase--use exceeds capacity--even though you readily admit that the quality of the range continues to diminish or remain static. When 50% of the range is in poor shape, it is hard to understand why you would call for raising the levels. You seem to feel that the only formula for improving range quality is to allow more cows--at subsidy prices--so that you can get more money for structural range improvements. Range improvements have not substantially helped the over-grazing problems of the past and present, nor will they produce future benefits. Grazing levels should be DRAMATICALLY decreased until such a time as the Arizona Strip returns to the 4-foot-high levels of grass which were historically present prior to the arrival of cattle and sheep. Permanent rest is what much of the land is in need of. Why is it so hard to support meaningful reductions in grazing allotments? And if the reason is that the cowboys and their way of life must be maintained at all costs, then I would say that we should subsidize them completely. As with many agricultural endeavors, the government could pay the farmer not to produce. Only a small percentage of the Strip's beef is of national importance and we could just as easily pay the ranchers not to run their cows. Why should the American taxpayer continue subsidizing the destruction of the public lands? 2

I have several concerns about mining. I fully understand that the 1892 Mining Law pretty much ties your hands on this issue, but I would still like to go on record as saying that I oppose ALL uranium mining in close proximity to the Grand Canyon. Each project should be closely monitored to ensure safety. Mitigation measures should be stringent, and you should always attempt to err on the side of safety, rather than helping mining companies like EFN have an easier time of it. If they ever screw up--and they came real close with the spill from the holding tank at Hack II--you folks are going to look real bad. I see no mention of a proposed uranium processing plant which as been rumored about for years. What is the status of that proposal? I also see no clear statement that it has been documented time and time again that increased access to remote mining areas promotes archaeological vandalism. I have yet to hear about a mine where the sites in its general proximity have not been looted. I am not accusing the companies themselves of ARPA violations, but I would steadfastly maintain that when you build roads, or improve roads, into formerly untraveled areas of the Strip, you ALWAYS end up finding arch sites getting looted. Mining and cultural resource depletion go hand 3

03-13 (continued)

2. See general respnse to public comment V-9.

3. A uranium processing plant has not been proposed for construction on public lands in the BLM Arizona Strip District.

in hand, and I don't see that this plan addresses this on-going problem. Lawsuits undoubtedly await your agency if this type of documented damage continues to take place without one single person being caught and prosecuted. At this point it would appear that the BLM has not come to grips with how to balance these two conflicting resources. 4

As for the Social Perceptions, it would seem to me that the locals don't care very much for the BLM, no matter what you do. The minimal differences between Alternatives 2 & 3 will insure their animosity. That doesn't mean the locals should be appeased. Their strongest desire is to develop the Arizona Strip. Anything short of free and unlimited access is going to draw their fire. The point I'm getting at here is this: certain goals called for under Alternative #3 are made to appear much more significant to the local populace than they really are. By law you are supposed to protect the resource. You are not in business to make everyone happy. It would be nice if that could happen, but it is not of primary importance. The environmental integrity of the Strip should be #1 in your hearts and minds.

Turning specifically to the PA, I would begin by focusing on the issue of habitat protection for endangered species of plant and animal. I feel the PA should call for stricter standards in those areas where threatened and endangered species occur, both now and historically. The desert tortoise is in need of much help and under the constant pressure of increasing habitat destruction. As for Forest Resources, I would point out the potential NEPA violation which results from the fact that there is little or no difference between the alternatives--they are all virtually the same. As for OHV use, I would say that the open category of 1,400 acres should be removed from the PA. Are these 1,400 acres dead? If they aren't, then it's hard for me to figure out how a responsible land use manager could justify allowing all-terrain vehicles to churn up the living landscape. You can be sure that these vehicles will turn this 1,400 acres into a moonscape very rapidly. OHV use should be confined to existing roads--period. 5

Under the chapter entitled Affected Environment, I have several concerns. First, it is hard to believe that there are only 55,000 acres of land on the entire Arizona Strip that are considered unsuitable for mineral development. Once you remove the towns, what's left? What does it take to remove lands as unsuitable for mining from an environmental standpoint? Anything? Why haven't any of the nine gypsum mine sites been reclaimed? With the issue of Cultural Resources I have several problems. Why has only 2% of the Strip been surveyed for cultural resources? Why is the Paria Plateau made to sound like the premier area on the Strip, under this section of the plan, and yet not afforded such importance when the ACEC's are being considered? Why doesn't this section include the documented damage to cultural resources? This is the natural spot for including the documented connection between increased developmental access and pothunting. In my opinion you have left out a VERY important aspect of the affected environment, and given the fact that it relates directly to pro-development issues I find this extremely biased. I would suggest that you need to add a section about the criminal loss of cultural resources--past, present, & 6 7 8

4. Please refer to the response to letter 02-02-06 and the corrected Chapter IV of the final plan. The vandalism of cultural resources is a very complex problem. New roads do increase accessibility but also, severe damage to cultural sites has occurred from vandals creating new roads to cultural sites. We address the issue of roads and the correlation to cultural site vandalism through management prescriptions for existing roads that close and rehabilitate existing roads where no public or administrative need exists. Severe damage to cultural sites also has occurred where vehicle use is restricted by terrain and individuals have to hike or ride horses to access the area.

5. See response 04-30-01.

6. A withdrawal order must be clearly justified and based on an analysis that shows why other alternative options will not accomplish the desired management objective. The alternative of requesting large withdrawals was considered during preparation of the draft RMP/EIS, but not chosen for detailed study (see text addition, page II-4).

As of June of 1990, five gypsum operations are ongoing; one has been partially reclaimed with ongoing operations on the remainder; and one operation is on standby, awaiting the outcome of a patent application. Steps are being taken by the Bureau to assure reclamation of disturbances associated with the other two cases.

7. The low percentage of cultural inventory on the Arizona Strip is the result of several factors. Many large parcels were inventoried for the grazing EISs at a standard that does not meet current Class III intensive survey methodology. Inventory currently is at Class III levels that meet standards agreed upon through a Programmatic Memorandum of Agreement with the State Historic Preservation Officer. However, acreage totals are based on the specific project, and the majority of NEPA initiated inventory survey is for rights-of-way, range improvements (pipelines, fence lines, reservoirs), and mineral explorations are small (three to thirty acres). At this level, inventory adds up slowly. Management prescriptions for Special Management Areas in this RMP have identified inventory needs for priority areas and will augment the existing inventory. See Comment Response 03-13-01 for why the Paria was not proposed as an ACEC.

8. Please refer to the amended Cultural Resources section in Chapter III which now addresses the issue of cultural site vandalism as part of the affected environment.

future. When you discuss the matter of Watershed Resources you show that 36% of the district is in the unsatisfactory range, and another 40% is static while being susceptible to erosional damage. Then you call for increasing the grazing AUM's. How do you reach such a strangely contradictory conclusion? It would seem that the data would demand a decrease in grazing numbers. Under the section entitled Special Status Animal Species I would like to make the point that the issue has nothing to do with predators. Mountain lions and coyotes shouldn't be the scapegoats for the real problem, which is habitat destruction. If, for instance, tortoise numbers go down, this shouldn't be justification for killing off predators. Under Forest Resources I notice a dramatic decrease in permits, fuelwood, posts. Why is this? How many MMBF per alternative? The section about Grazing is perhaps the most troubling part of this plan. I don't want to beat a dead cow into the ground, but intensive management practices smack of Savery grazing, and that is still unproven as a valid management tool. I will say that Savery demands total commitment on the part of the permitee. Steve Rich seems to be making it work down in House Rock Valley, but he is almost religiously enamored with the Holistic systems approach. Most cowboys are not going to be as dedicated to the program. Putting more cows on the land translates into over-grazing. It doesn't get better, it continues to get worse. When are you going to take the strong stand against the environmental destruction created by this publicly subsidized nightmare? Under the Wildlife Habitat section I would take exception with the insane habit of chaining. This practice is absolutely no different than what is taking place in the rain forests of this planet. Slash and burn practices are short-sighted strategies. Five years after the cows have taken over a chained area it looks like a dead zone. The pinyon/juniper woodland is one of the most complex and healthy regions of the Strip, with countless species dependent upon it for life. How the hell can you justify the removal of a diverse forest ecosystem in favor of mono-culture grasslands? In addition, it is well documented that the pinyon/juniper woodland has the highest concentration of archaeological sites of ANY land type on the Strip. The Anasazi and Paiutes usually chose this area to live, and when you chain this woodland zone you invariably destroy many prehistoric sites. You should definitely be taken to court if you continue such blatantly destructive practices. Under the section about Wildlife, I would suggest that predators should not be eliminated due to decreasing numbers of deer or bighorns. The real issue is habitat destruction, not mountain lions. And cattle compete with these wild species for forage and pummel the land in the process, so get rid of the cattle, not the coyotes. As for section about Recreational and Scenic Importance, I am totally opposed to the withdrawal of any part of the Virgin River Gorge. This area epitomizes the concept of wilderness land and should remain in that class. How does removing a wilderness area from that classification help to protect it? The public gains nothing and the resource is degraded. I am against ANY wilderness withdrawal. In the Income section I noticed that you conveniently set up the "Non-Farming" stipulation so that you don't have to show just how insignificant the ranching interests are to the overall economy of the Arizona Strip. My point is this:

9

10

11

12

13

03-13 (continued)

9. Nowhere in the discussion of Watershed Resources is there a call to increase grazing AUMs.

10. The decrease in woodland product permits is due to alternate energy sources (natural gas), accessibility and alternate sources for woodland products.

11. Intensive management as used here, refers to all rotation grazing systems. The Arizona Strip District has one Savory System (Holistic Resource Management) at Signature Rock which has not been stocked with cattle for most of two years due to drought and grasshoppers.

12. Chainings and other types of vegetative manipulations have been used in place of wildfire to release undergrowth. The success or failure of vegetative manipulation (as it relates to livestock use) depends on the range manager. Vegetative manipulations, if designed and managed properly, can and do provide certain habitat elements for wildlife that would be lacking otherwise. Present Bureau direction is to design seedings to benefit as many users as possible. Monoculture seedings are more an exception than the rule.

13. The Virgin River Gorge is presently protected by wilderness designation and a scenic withdrawal. The withdrawal prohibits mining under the 1872 mining law. Portions of this withdrawal overlap the wilderness designation, which also prohibits mining under the 1872 mining law. The RMP proposes to eliminate the scenic withdrawal only in the designated wilderness areas, thus eliminating a duplicate protection measure.

03-13 (continued)

ranching is undoubtedly the most important consideration in this plan, and yet it plays a very small role in the big picture. I would prefer to see less concern for the cattle interests and more for the recreational ones. On page III-35, paragraph #2, you state that the local public supports tourism and doesn't want any activity to take place that would harm that important business. Doesn't over-grazing negatively impact this valuable resource? 14

In the Environmental Consequences chapter we finally get to the heart of the differences between the four alternatives. It seems to me that your own data supports Alternative #3 as the one which goes the farthest toward protecting the largest number of resources. Using the comparative tables which occur in the section which highlights the present management activities, I see that Alternative #3 reduces negative impact to a greater extent than the PA. The numbers of special status species increases the most under Alternative #3. The greatest improvement to riparian areas takes place under Alternative #3. The negative impacts of mineral exploration as they relate to watershed conditions are minimized the most effectively. The quality of the range would be improved to the greatest extent under Alternative #3 because of its attempt to further reduce over-grazing. Alternative #3 would strongly address the recreational concerns and focus the most attention on recreational demands--other than with OHV's. Visual Resource management would receive greater attention under Alternative #3 and provide the greatest level of protection. I also think you overstate the negative impacts of OHV and mineral exploration restrictions under Alternative #3. OHV use is environmentally destructive and should be confined to existing roads--period. Under Alternative #3 the vast majority of the Strip would be open to mineral exploration, and there isn't enough difference in the acreages in each alternative to warrant the conclusion that Alternative #3 would "severely restrict or preclude mineral resource exploration". All things considered, I think your own analysis points to Alternative #3 as the best one of the group. It accomplishes the most good for the largest number of resources, and that's what you folks are there to do.

Thank you for the opportunity to reply to this well thought out document. I know you are trying to do the best job possible. I just hope that you will one day move away from the emphasis on range and toward a more balanced approach to land use management. Please let me know of any future developments.

Sincerely,

Stephen B. Carr

Stephen B. Carr
800 South 6th Street
Williams, Arizona
86046

03-13 (continued)

14. Environmental Impact Statements were completed in 1979 and 1980 for the Vermillion and Shivwits Resource Areas for livestock grazing. Livestock carrying capacities for each grazing allotment were set along with the development of allotment management plans to help meet the objectives and goals set forth in the impact statements. Studies, including trend and utilization, were also initiated if they had not been previously, to monitor the grazing use of the range. This was done to prevent over-grazing of the public lands, improve biodiversity, stabilize watersheds, along with improving wildlife habitat and recreational values.



1-90-BLM-1

ROSE MOFFORD, GOVERNOR
RANDOLPH WOOD, DIRECTOR

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

2655 E. Magnolia, Suite 2
Phoenix, Arizona 85034

March 28, 1990

Mr. Dennis Curtis
Bureau of Land Management - Arizona Strip District
390 North 3050 East
St George, Utah 84770

RE: BLM-Arizona Strip District: Draft Resource Management Plan (RMP) And Environmental Impact Statement (EIS)

Dear Mr. Curtis:

The Arizona Department of Environmental Quality (ADEQ), Water Assessment Section, has reviewed the draft Resource Management Plan (RMP) for the BLM - Arizona Strip District. We appreciate the opportunity to comment on the document.

The ADEQ is responsible for the protection of water quality in the state. Data on water quality is available for the three perennial stream systems in the district - the Kanab, the Paria, and the Virgin. The 1988 Nonpoint Source Assessment Report listed the protected uses for these systems as follows:

Kanab	Paria	Virgin
IHC	IHC	IHC
A&W	A&W	A&W
AgL	-	AgL
-	DWS	AgI

IHC - Incidental Human Contact
A&W - Aquatic and Wildlife
AgL - Agricultural Livestock Watering
AgI - Agricultural Irrigation
DWS - Domestic Water Supply

The Department of Environmental Quality is An Equal Opportunity Affirmative Action Employer.

Central Palm Plaza Building 2005 North Central Avenue Phoenix, Arizona 85004

The principal pollutants in all three systems are sediment/turbidity, total dissolved solute (TDS), and salinity. These contaminants reflect erosive conditions prevalent throughout the district, conditions documented by the estimate that 36 percent of the district watersheds are in unsatisfactory condition (Category IV watersheds). Much of the erosion occurring results from human activities such as off-highway vehicle use, grazing, and silviculture. As the soils in the Category IV watersheds are reported to be responsive to treatment, the ADEQ recommends that protection and enhancement of these watersheds be an integral component of the chosen management plan. 1

Overall, the ADEQ is supportive of alternative 2. It appears to successfully integrate the conflicting demands of multiple use, while providing a level of protection for resources, including water, that is very satisfactory. However, several options proposed under the conservation-oriented alternative 3 offer superior protection of surface water quality. This protection is obtained by designating larger Areas of Critical Environmental Concern (ACEC) and imposing tighter restrictions on mining and off-road vehicle use. The ADEQ requests that the BLM consider incorporating the following alternative 3 proposals into the final management plan:

Fort Pierce ACEC

Designate the Fort Pierce ACEC as the full 3600 acre parcel, thereby including the critical watershed into the ACEC. The watershed's easily eroded, saline soils should be managed under ACEC status to prevent excessive salinity loading to the Colorado River. If the critical watershed component is not included in the Fort Pierce ACEC, the ADEQ would expect the BLM to monitor salinity to insure compliance with standards set forth in the Colorado River Basin Salinity Control Act of 1984. 2

Virgin River ACEC

Withdraw the entire Virgin River ACEC from mineral location and OHV use, and establish the 120 acre riparian demonstration area at the Virgin River/Beaver Dam Wash confluence. This protective management strategy would conform to policies currently under development by the Governor's Riparian Task Force, established to protect Arizona's threatened riparian environments. 3

1. Refer to 04-13-03.

2. The endangered Siler pincushion cactus was the primary reason for designating the Fort Pierce ACEC. The natural occurrence of saline soils is widespread on the Arizona Strip District as noted on Map III-11 of the RMP and by itself would not meet the ACEC relevance and importance criteria as outlined in 43 CFR 1610.7-2. Increase in size of the Fort Pierce ACEC would place unnecessary restrictions on other multiple use considerations in the buffer area and result in redundancy of protection measures. The majority of lands classed as slightly saline soils would have off-highway vehicles (OHV) limited to designated roads and trails.

3. The Virgin River Corridor ACEC within the gorge is closed to mineral entry by the Virgin River Scenic withdrawal. The Virgin River Corridor ACEC area below the Virgin River Gorge is presently covered by existing mining claims. Closure to mineral entry would be subject to valid existing rights, including valid mining claims, in effect on the date of withdrawal. Valid existing rights on mining claims include the right to develop the locatable minerals beneath them. For this reason, a closure to mineral entry would not preclude or further restrict mineral-related activities.

   The ACEC designation requires mining exploration and development entities to file a Plan of Operations with BLM for activities beyond casual use. Approval of the Plan of Operations by BLM assures that activities are conducted in a manner that prevents unnecessary or undue degradation, provides protection to non-mineral resources, and provides for reclamation of disturbed areas. Based on our experience during the last decade, existing policy and procedures are adequate to allow mineral activities while protecting other important resource values. The final RMP establishes a 120-acre riparian demonstration area at the Virgin River/Beaver Dam Wash confluence. The text in chapter II of the proposed RMP has been changed to reflect this change.

04-01 (continued)

Off-Highway Vehicles

Regulate off-highway vehicles as proposed in alternative 3. With 5400 miles of existing roads, recreational opportunities would not be adversely curtailed by closures proposed in alternative 3, while the benefits to water quality would be substantial. | 4

Additional issues of concern include the implementation of new management strategies on grazing allotments. Out of seventy-four allotments scheduled for alternative management, twenty-five allotments show no change in management strategy. We urge the BLM to implement proposed management systems on all grazing allotments. In addition, the maps on watershed categories (II-62 through 64) and woodlands harvest areas (II-68 through 70) indicate that a substantial portion of proposed woodland harvest would occur on Category IV watersheds. Vehicle use and other harvest-related activities must have appropriate BMPs applied and be closely monitored for their effectiveness. | 5 | 6

Again, the ADEQ appreciates the opportunity to comment on the Strip District RMP. We hope they are beneficial.

Sincerely,

Carol Russell, Manager
Nonpoint Source Unit

CR:CSW:cn

CC: Mark Gard, EPA

4. The proposed RMP has been changed to include 47,900 acres more in the closed OHV category.

5. The 25 allotments shown as "not" being implemented are awaiting financing of range improvements necessary to implement grazing systems.

6. Before an area is designated as open to green wood cutting, a woodland management plan would be developed. The plan would include proposed access and incorporate best management practices to reduce erosion.

5122 East Citrus Street
Tucson, Arizona 85712
March 29, 1990

Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

Dear Sir:

The following are comments on the R.M.P. and draft E.I.S. for the Arizona Strip District.

We notice that Alternative Four is especially poor because it caters to local consumptive users - this is not supposed to be the first concern of B.L.M. The 6,200 acres in the Ivery Swale area should not be given to Page for a new airport.

The cumulative impact of uranium mining should be addressed by an E.I.S. covering the impact of mining on the Strip as a whole unit, not scattered bits of 15-20 acres). 1

The problem of overgrazing should be honestly reviewed as part of the R.M.P.-E.I.S.

It is noticed that off-road vehicles are causing irreparable damage and preferably should be prohibited in the Strip.

There are being proposed way too few Resource Conservation Areas, Areas of Critical Environmental Concern and Special Recreation Management Areas - these would help protect the land and all those proposed should be included.

Sincerely,
Walter + Dorothy Pelech

04-02

1. Cumulative impacts from the exploration and development of uranium mineral resources were addressed throughout this RMP/EIS. For analysis purposes, exploration and development were projected to occur at the same rate they have over the past nine years. The fact that each uranium mine has an average disturbance of 17 acres was considered in this analysis. Impacts associated with access, power, and exploration also were considered (see Appendix 28 and Chapter IV of the final RMP/EIS.)

Southwest Resource Council
PO 1182, Hurricane
Utah 84737

comments on Arizona Strip RMP

the Kanab Creek area is a jewel of the Arizona Strip and seems to be ignored in the R.M.P. B.L.M.'s rationale to drop Kanab Creek from A.C.E.C. designation is weak and without merit. ("the scenery, remoteness, and naturalness exhibited by the canyon is not unique to the region." R.M.P.)

the Kanab Canyon area is a vast, rugged and primitive system of colorful canyons and geological formations, spectacular vistas and natural beauty. the features are linked to and are virtually identical to Grand Canyon of the Colorado River on a smaller scale. Numerous locations on the plateau lands surrounding the upper rim of Kanab Canyon offer views of the steep-sided canyon walls, benchlands, and riparian canyon bottoms. Kanab Canyon forms the largest tributary drainage system on the north rim of Grand Canyon with major canyon systems.

A) Kanab Creek is rich in archaeological resources. B.L.M. should conduct a class II cultural resource inventory. How can you manage something if you don't know what it is?

B) Superior habitat of peregrine falcon.

1

04-03

1. See general response to public comments page V-6.

The absence or presence and significance of archaeological resources in Kanab Creek has not been substantiated by BLM. We totally agree that a class II inventory is needed.

The majority of historical and superior peregrine falcon habitat is included in wilderness, Grand Canyon National Park, or covered by OHV designation. Kanab Creek north of Gunsite Point is marginal or acceptable peregrine habitat.

With the exception of Grama and Hacks Canyon and the area south of Hacks Canyon, from Gunsite Point south to the Grand Canyon Park boundary, both sides of Kanab Creek (to the rim on the west side) are administered by the USFS.

The Kanab Creek scenic withdrawal is not needed due to wilderness and OHV designations.

04-03 (continued)

(2)

c) the Forest Service considers Kanab Creek nationally significant as wilderness. One side of Kanab Creek is important and the B.L.M. side isn't?

d) Kanab Creek is an integral part of ecosystem of Grand Canyon National Park.

e) Excellent opportunities for primitive recreation.

f) B.L.M. should bring forward into the R.M.P. the Kanab Creek Scenic withdrawal from M.F.P.

the Kanab Creek area clearly meets the "relevance and important" criteria for a A.C.E.C, more so than areas nominated by B.L.M. in the R.M.P.

this area also needs a management plan for next ten years to protect its resources: T&E. wildlife; recreation; riparian; archaeological. 1

the RMP seems to lack coordination with other federal agencies. ie. Grand Canyon National Park; Arizona Game and Fish and the Forest Service. 2

House Rock Valley

the RMP does not adequately protect all of the unique scenery of House Rock Valley; B.L.M. should add the lower part of House Rock Valley to Area B in the Preferred alternative also add class II VRM to lower part.

04-03 (continued)

2. In addition to being on the general mailing list, separate meetings were held with Grand Canyon National Park, Glen Canyon and Lake Mead National Recreation Areas, the North Kaibab Ranger District of the U. S. Forest Service and the Arizona Game and Fish Department. The meetings, held in November and December 1987, and January and June of 1989. The purpose of these meetings were for scoping of the RMP and coordination of activities and programs (see Chapter V, Consultation and Coordination). The final also reflects a new section in Chapter IV called "Impacts to Adjoining Lands" that will improve coordination across agency boundaries.

04-03 (continued)

(3)

Viewing scenery is ranked as the number one pursuit of all visitors to public lands. thousands of tourists drive across Highway 89A every year. It is important for BLM to protect full retention of the landscape character as a whole - not just the north side of the highway. This should be a management goal for the life of the plan.

BLM should not trade any land in House Rock Valley.

BLM should recommend all powerlines be put underground around Marble Canyon and on the whole Arizona Strip.

Marble Canyon ACEC should be 15,500 acres to properly protect the area. BLM should have adequate management stipulations and funding to protect these sensitive areas. 3

Vermillion Cliffs

BLM should retain the Vermillion Cliffs Natural Area designation in RMP. the Natural Area would continue to provide important protection to area north of highway 89A. the natural setting of the area would be maintained, providing travelers along scenic highway opportunities to view spectacular scenery.

3. See general response to public comments page V-6.

04-03 (continued)

(4)

Grazing in the natural area is visually impairing the area and should not be allowed. this area should be managed to maintain its natural character.

Woodlands - before woodcutting is allowed B.L.M. should do a cultural clearance.

no chainsaw tree cutting on the Grand should be included in preferred alternative.

with only small islands of trees on the Arizona Strip it is an important recreational and wildlife resource. this allows the recreation setting to remain as they are and takes priority. there should be no commercial thinning (use fire management.)
Keeping the trees is the highest and best use of Public lands.

Scenic Highways and Byways
How will B.L.M. protect these travel corridors? It was not clear in the R.M.P. what was recommended is what the stipulations would be.
BLM should carry forward from recommendations in M.F.P.
Scenic Highways should be: 1) Hwy 89A
2) I-15 through Virgin River Gorge.
3) Hwy 54 Hurricane to Fredonia.

04-03 (continued)

4. Grazing is a legitimate use of public lands and can be compatible with natural values. Two pastures in the House Rock allotment have experienced a severe drought and heavy grasshopper use. Livestock use has been reduced significantly. Conditions should improve as weather patterns change. See also general response to public comments page V-9.

5. The ponderosa pine forests provide important wildlife habitat and recreational settings. The ponderosa pine forests are designated in BLM's category C which means that they will be managed for the enhancement of their uses and values such as wildlife, recreation, livestock grazing and watershed protection. Management programs may include fire and/or ecologically sound and carefully managed silvicultural practices, including thinning, necessary for the health, vigor, regeneration or biological diversity of the forest ecosystem or beneficial to resources, such as wildlife.

6. The I-15 Virgin River Gorge corridor is protected by wilderness designation and a scenic withdrawal. In other areas travel corridors would be managed according to VRM Class I guidelines.

7. BLM supports the nomination of I-15 through the Virgin River Gorge from the Nevada state line to the Utah state line and highway 89A, from the Utah state line near Fredonia, Arizona to Bitter Springs, Arizona as National Scenic Highways.

Back country by-ways will be considered in later planning efforts when more is known about their impacts. See text change in Table II-1, page II-32.

(5)

recommended Backcountry Byways
1) Mt Trumbull Rd
2) Quail / main street Rd.

recommend stipulation of 1) no new development
2) ~~visual~~ visual - along road
3) ¼ mile zone protection

How will B.L.M. enforce protection of area B.? | 8

Grazing

Conflict with wildlife forage; deterioration of resource; riparian resources: water needs and recreation will necessitate a revision of grazing management during the life of the plan. trespass is often a problem and fragile riparian streams and soils show negative impact with important values being compromised, ie. Paria Canyon (Buffalo); Kanab Creek; Vermillion Cliffs Natural Area. | 9

Income

B.L.M. should estimate Economic value of recreation. Recreation and tourism are important economic values. BLM could use number of people who visit Tuweep, Paria. 5 country government has figures from their tourism Study, ie. example is included in Dixie RMP. | 10

04-03 (continued)

8. The management guidelines for the B areas are met/implemented by imposing various resource management decisions described in Tables II-1 and II-2. See Map II-2 and text change on page II-3.

9. During drought there could be conflicts for forage, but in most normal or wet years there are little or no forage conflicts. There is no empirical evidence of conflict, as diet overlap studies in the Strip show small overlap between deer/cattle or antelope/cattle.

   Trespass problems are dealt with when discovered and they are part of our range supervision work. There are trespass problems that occasionally escape notice and we always work to improve this. But trespass is a minor problem.

   The Paria River riparian system has improved with improved grazing management. Our studies show this. Cattle graze six months of a 36-month grazing cycle on the Paria River. Two three-month grazing periods and 30 months of rest. This riparian system has shown a dramatic increase in willows and cottonwoods.

   The Kanab Creek riparian system, however, needs to be improved. Changes will be made in the grazing systems in the near future.

10. We agree that recreation and tourism are important economic values. Table III-21 has been changed to reflect these values.

04-03 (continued)

(6)

BLM should provide a annual report of what has been implemented by RMP. the Public should be aware if BLM makes changes to RMP over the life of the plan.

we Strongly urge BLM to incorporate the recommendations in chapter 10 of the Arizona Strip Archeology overview "Man, Models and Management." 11

these include programs to deal with vandalism of sites, better field techniques, greater emphasis on Native concerns, land data synthesis.

In addition block surveys should be completed across the strip to provide site information so that cultural resources can be managed. ie. Kanab Creek; Shinarump cliffs; House Rock Valley; Toot Spring; Bakoon Springs; Shivwits; Resource areas etc. are examples.

the strip should move beyond mere "compliance" archeology. the strip's "public archeology" efforts are to be applauded and encouraged.

All of the cultural ACEC's do not have the proper acres and don't protect the resource.

the significance of cultural resources within these areas merits a rethinking of these management prescriptions.

04-03 (continued)

11. BLM anticipated the recommendation identified in Chapter 10 of Man, Models and Management (Altshul and Fairley, 1989). A test of new methods and techniques implemented by the ACEC CRMPs will allow refinement and evaluation before applying districtwide.

(7)

for example; Witches pool ACEC should be 1200 acres to ensure protection to all of the cultural resources.

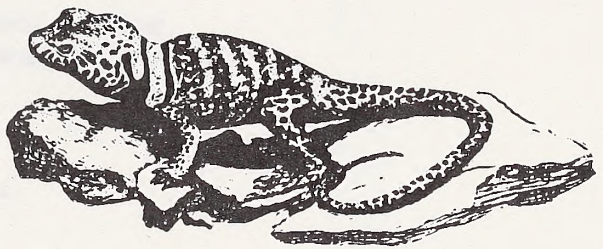
12

Sincerely
Southwest Resource Council
Jane Whaley

We support alternative B.

04-03 (continued)

12. The acreages of the planned cultural resource ACECs, are based on our best available information and cover the known important values. The ACECs identify a priority for funding lass II inventories, management planning, resource protection and monitoring, and future scientific study and research. Also, see general response to public comments page V-7.



P. O. Box 416
Kanab, UT 84741
April 2, 1990

Mr. Dennis Curtis, Planning and Environmental Engineer
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

Reference: Arizona Strip District Resource Management Plan
Comment

Dear Mr. Curtis:

I am an American citizen living in the State of Utah and working in Arizona within the Arizona Strip District. My frequent travel and access to work locations affords me opportunity to authoritatively comment on the Bureau of Land Management Draft Resource Management Plan (RMP) for the Arizona Strip District.

The RMP should recognize that over 265,000 acres of wilderness within the Strip is already off limits to many people and no longer considered land for multiple use. The Strip District has already been studied in great detail when wilderness areas were originally proposed and later withdrawn, during 1984. There is not a need for more wilderness areas.

The RMP emphasizes management of "remoteness areas for recreational experience opportunities," but it must be emphasized that the entire Strip is, by its very nature, remote. Travel anywhere on the Strip provides a "remote experience" and therefore, negates a need to withdraw specific areas to protect "remoteness" or create "no entry" zones. 1

A review of the numerous federal or state parks, wilderness areas, Indian reservations, game preserves or other protected areas around the Strip immediately reveal that less and less of this area remains available for the "working man" American taxpayer. Reviewing the state maps of Utah and Arizona provides a good example of just how little privately held or non-restricted BLM managed land remains for public access.

04-04

1. Much of the Arizona Strip is remote and this is one of the reasons why this area has a special appeal to many people. The isolated location north of the Grand Canyon limits accessibility and human use while also enhancing the quality of remote and back country settings. Within the context of multiple use, it is our judgment that actions are necessary and advisable to maintain appropriate remoteness features in some areas and associated remote recreational experience opportunities for interested publics.

The Bureau of Land Management is the least criticized federal land regulating agency. In fact, industry and private land users often compliment the BLM and support their policies to manage and provide use of western lands. America was founded by the "free and the brave," but continued encroachment by federal government of free access to public land will undermine this basic concept.

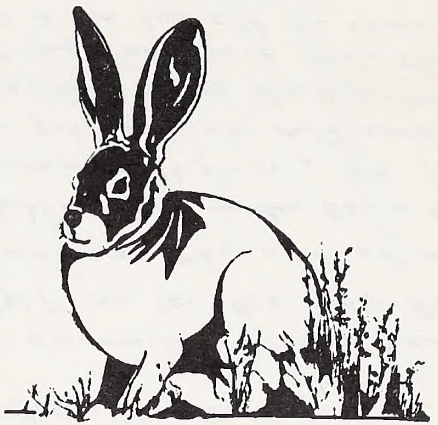
The entire RMP is a response to loud voices and strength of the environmental community and does not reflect the desires of America's masses, as financial muscle, legal expertise and political pressure cannot be coordinated from this area. Continued restriction of land use will place the common American on a federally created reservation, departure from which requires approval, observation, supervision, and authorization by the federal government. Keep America for Americans!

The federal law <u>does</u> <u>not</u> require that BLM modify current management practices, but only that they be reviewed. There is nothing wrong or inadequate with the present BLM management policy, therefore, a change is not justified.

The RMP Alternative #1 (no action), supporting continued existing management practices at current levels, is clearly the only realistic alternative to be selected.

Yours very truly,

Roger B. Smith



04-05

JOHN R. SWANSON
3400 Edmund Blvd.
Minneapolis, MN 55406

April 6, 1990.

Bureau of Land Management
390 North 3050 East
St. George, Utah 84770.

Dear Sirs,

Please accept my following comments concerning the
Resource Management Plan Environmental Impact Statement Draft
Arizona Strip District Bureau of Land Management.

I am acquainted with the Arizona Strip District, and continue to agree that the Arizona Strip District, Bureau of Land Management administered land, contains outstanding wilderness, wildlife, biological, cultural and scenic resources. Part of National Significance.
For the District's BLM features unique, varied and fragile natural attributes that provide a vital refuge for Man and for all Life, on this endangered planet.
I, therefore, wish to advise that I oppose the Preferred alternative.
as this proposal will decrease in quantity the nature of features including wilderness, wildlife - biological and scenic attributes. Added as existing soil - water and air resources.
Rather this area must be managed by management Decisions to values be saved so as to properly serve Man, and all Life
and to designate the Arizona Strip District, BLM, as a permanent dedicated National Natural Preserve, with No surface - sub surface activities - developments.
I select the following areas - acres as be added to the Arizona Strip District, Bureau of Land Management administered lands, as Wilderness dedicated as each area - acres available outstanding Wilderness values, and added to our National Wilderness Preservation System

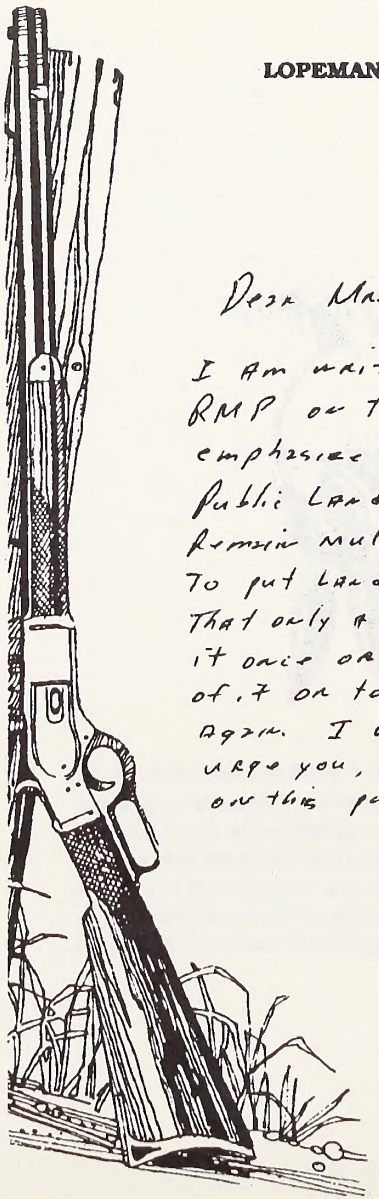
Wilderness additions only:
Beaver Dam Mountains 12,000
Private 124,000
Grand Wash Cliffs 191,000
Mt. Logan 29,000
Mt. Trumbull 6,000
Kanab Creek 154,000
Cottonwood Point 475.
Ponca Canyon - Vermilion Cliffs 204,000

Paiute 38,000
Pennenorit 138,000

Plus additional areas so as to Include in an Arizona Strip District, BLM, wilderness of 2120,000 acres.
So as to link this District as a National Critical Habitat area so as to save wildlife - biological resources, including the Desert Tortoise and mountain sheep.
To operate a National Wild and Scenic Rivers System in the District.
To preserve Riparian areas in their Natural Environment
and to accept that mineral - oil / gas activities in this area will destroy the life resources of the region.
To remove Private and to preserve areas of them as retreats for hiking, only.
To ban the use of off-Road Vehicles, as their use destroys soil and water resources.
and to seek grazing by domestic animals so as to save plant life.
To acquire all Private lands and with No disposal of public lands
With No activity considered as they ruin the area's scenic values.
Stop uranium mining as it is above the health of this area's population.
Develop an overnight number, with maximum size, of acres of Critical Environmental Concern, Resource conservation areas and special Recreation Management areas quota fully protect a game.
With No new airport in Every Desert.
Save what we have our National Parks and Waters is our Game of America!

Sincerely,
John R. Swanson

04-06



LOPEMAN'S FRONTIER MOVIE TOWN
297 West Center
P. O. Box 697
Kanab, Utah 84741
801-644-5337

4/5/90

Dear Mr. Curtis:

I am writing to tell you the draft RMP on the Az Strip District does not emphasize the role of multiple use. Public Lands in No Az + So Ut. must remain multiple use. It is wrong To put land into wilderness zones so That only a few Back packers can use it once or twice. Then They are tired of it or too old to come back + use it Again. I urge you + my grandchildren urge you, not to put such restrictions on this public Lands.

Best Regards
Ray Lopeman

Arizona • Colorado • Idaho
Montana • Utah • Wyoming

National Audubon Society

ROCKY MOUNTAIN REGIONAL OFFICE
4150 DARLEY, SUITE 5, BOULDER, COLORADO 80303 (303) 499-0219

April 4, 1990

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis,

The National Audubon Society has long been concerned with the environmental integrity of the Arizona Strip country and has commented on a variety of issues ranging from ACECs, to wilderness, to forest planning, to impacts on the North Rim of the Grand Canyon National Park, to the controversial mining issues that have surfaced in the '80s. At both the local chapter level and national level Audubon has alerted its members of the importance of sound management to protect the natural resources. Our publication, Audubon Activist, has recently become involved in reporting this issue nationwide.

V-69

Specifically turning to the RMP and list of alternatives, though there were portions of several that we favored, it was not possible to select one as being all encompassing.

For instance, it is apparent that extensive roading shown as a complex web on a map could be a major problem yet it was not possible to always tell where there was a conflict with a specific sensitive sight.

In the alternatives, the lumping of recreation with environmental issues, though at first glance appearing to be an acceptable juxtaposition, becomes confusing especially when the recreation forms are not totally compatible. A good example is use of riparian areas and especially the Virgin River Gorge where archaeological resources and endangered fish species mix with recreation pursuits.

I felt the use of RCAs may solve several of the more critical questions now coming under ACEC planning criteria, yet caution that RCA protection will only succeed if it receives congressional sanctity.

Mining and the concomittant roads and exploration procedures are the major thorn "in the saddle". Again using an example from the report under the preferred alternative (#2) it was not clear if no surface occupancy in the Virgin River Gorge, Kanab Creek and Grama Canyon meant just that or merely that it would require costly directional drilling. We believe there should not be any drilling in these three areas - period. Other parts of the RMP | 1

04-07

1. Portions of Appendix 10 were in error and have been corrected. See text change on page A-44. Under the preferred alternative, no surface occupancy would be allowed in the Virgin River Gorge, Kanab Creek or Grama Canyon. Unless exceptions to this stipulation are granted, oil and gas exploration and development would have to be conducted via some form of directional drilling. Because exploration techniques employing this method are more costly than conventional methods, leases issued with this stipulation are less likely to be explored.

04-07 (continued)

did provide considerable detailed backup data about the fragile integrity of these three supreme riparian areas.

Another mining concern is that of the rapidly growing cyanide heap leaching process used by gold mining concerns and expanding at an exponential rate in the Great Basin states. Runoff, ground water impacts, and the pond use (attractant) to migratory birds is especially, in a xeric ecosystem, a problem of calamitous proportions.

In conclusion many aspects of the RMP draft do address the wide range of floral and faunal concerns, however the final package appears to weigh in too much on the consumption side whereas the fragile character of the ecosystem should be paramount. We urge that this be corrected.

Sincerely,

Robert K. Turner
Regional Vice President

cc: Prescott Audubon Society
RKT:AA



04-08

RUSSELL D. BUTCHER
Southwest & California Representative

April 2, 1990

RE: ARIZONA STRIP DRAFT
RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT
STATEMENT

Mr. Dennis Curtis
Team Leader, RMP/EIS
Arizona Strip District
Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

Dear Dennis:

National Parks and Conservation Association, a 100,000-member nonprofit organization, founded 71 years ago to promote the protection, enhancement, and public understanding of the national park system and related public lands, appreciates the opportunity to offer comments on the BLM's Arizona Strip District draft Resource Management Plan/Environmental Impact Statement.

We like to say, at the outset, that in general this is an excellent document, well written and well presented. It shows a lot of very solid work by the BLM-Arizona Strip staff.

Regarding suggestions for enhancing the RMP/EIS, may we offer the following:

- While the actual management prescriptions of the Preferred Alternative (Alt. 2) appear on the whole to be appropriate and sound, we urge that serious consideration be given to adding several additional special management areas--either Resource Conservation Areas (RCAs) or Special Recreation Management Areas (SRMAs). While these are simply management labels, we think several other parts of the Strip are worthy of that status because of particular scenic and/or watershed values they contain. These are:

(1) In the Kanab Creek Canyon area, especially:

(a) Hack Canyon and its side canyons, up-canyon from the wilderness boundary. Not only is this a highly scenic, spectacular canyon, per se; it is also a significant model of just how well prior mining sites can be restored to a natural condition (in this case, accomplished by Energy Fuels Nuclear, Inc.). RCA or SRMA status would excellently acknowledge both realities. 1

National Parks and Conservation Association
Box 67, Cottonwood, Arizona 86326
(602) 634-5758

1. Kanab Creek does not qualify as an SRMA or RCA. These canyons do not have important overlapping resource values or require intensive recreation management. The Kanab Creek drainage is under the administration of three different agencies with different regulations and mandates. From where Kanab Creek forms a major canyon to where it meets the Colorado River, 80 percent of the stream channel is either in wilderness or National Park and with our proposed plan to close Grama Canyon and Kanab Creek (north of Snake Gulch) to OHV use, 100 percent of the Kanab Creek channel has some form of protective management. The remainder of Hacks Canyon that is not designated as wilderness, will limit OHV to designated roads and trails.

04-08 (continued)

2-NPCA re AZ Strip RMP/eis draft

(b) Other Kanab Creek Canyon tributary canyons, not within wilderness, such as Grama Canyon; and on farther up BLM's portion of Kanab Creek Canyon, north of the junction with Snake Gulch.

(2) In the Parashant Canyon and Andrus/Dansil canyons area: the upper parts of these canyons are on BLM land. While not as scenically noteworthy as the Kanab Creek canyons, they do nevertheless comprise important watershed values that interrelate with adjacent Lake Mead National Recreation Area and Grand Canyon National Park that encompass the lower reaches of these watersheds. RCA or SRMA status would acknowledge this ecological value that relates as well to adjacent federal lands. 1

(3)(a) The southern part of the Grand Wash Cliffs, south of Grand Wash Cliffs Wilderness, is extremely scenic and geologically interesting. Designating this awesome escarpment as either RCA or SRMA would acknowledge this special quality.

(b) Although somewhat less dramatically scenic, the section of Grand Wash Cliffs, between Grand Wash Cliffs Wilderness and Paiute Wilderness, may also be worthy of RCA or SRMA status.

● Concerning the Area of Critical Environmental Concern (ACEC) proposed to extend along the westerly rim of Marble Canyon, adjacent to Grand Canyon National Park, we support Alternative 3 as being closer to a likely ideal ACEC. Alt. 2 appears to be too tightly drawn to adequately satisfy the protective purpose for which the special management is being proposed. At least some expansion beyond Alt. 2 appears worth evaluating--to be sure of including the critical habitat around the tributary watersheds of Marble Canyon--as around Badger Canyon, Rider Canyon, North Canyon, and Bedrock Canyon. We urge that erring (if at all) on the side of generosity rather than insufficiency is preferable when dealing with the welfare of a rare or endangered plant species.

Other issues:

● Concerning "Ownership Adjustment," we agree with Alt. 2 that any land disposals that involve desert tortoise habitat "must result in a net affect that is positive or neutral for the tortoise." The statement under Alt. 3 ("Retain in federal ownership all habitat essential for the survival of the desert tortoise [emphasis added]") should also be included under Alt. 2; for it should not be implied that Alt. 2 would allow the disposal of lands essential for the tortoise's survival. 2

● Regarding a new airport to serve the City of Page, we enthusiastically support Alts. 2 and 3: that Ferry Swale not be considered for this purpose because of "potentially significant adverse impacts associated with wilderness," etc. Other alternatives should be carefully and thoroughly evaluated--including possible sites on the Navajo Reservation. Because of the uncertainties of the latter, we would suggest that a BLM-Navajo land exchange be pursued, should a suitable airport site be found on

04-08 (continued)

We have examined Andrus, Dansil, and Parashant Canyons to determine if designation as SRMA or RCA is warranted. They contain back country recreation and scenic values, but these canyons do not have important overlapping resource values or require intensive recreation management. We will close the areas to OHV to protect and maintain the scenic values and remoteness of the area.

We have examined the Southern Grand Wash Cliffs to determine if designation as SRMA or RCA is warranted. The area contains back country recreation and scenic values but these cliffs and canyons do not have important overlapping resource values or require intensive recreation management. We will limit OHV activity in the southern Grand Wash Cliffs and Hidden Canyon to designated roads and trails to protect and maintain the scenic values and remoteness of the area. We have also adjusted the lines to include all cliff escarpments between the Paiute Wilderness Area and the Grand Wash Cliffs Wilderness Area (see Map II-15).

The additional 4,800 acres identified for the Marble Canyon ACEC in Alternative 3 were for *Pediocactus peeblesianus* var. *fickeiseniae*, a category I special status species. Studies are showing a greater abundance than earlier known, and inclusion in an ACEC is not warranted. The 10,700 acres planned for the Marble Canyon ACEC is adequate for the listed Pediocactus bradyi.

2. The proposed RMP would retain all desert tortoise habitat in Category I or II. Land disposal actions that may take place in Category III habitat would go through a Fish and Wildlife Service Section 7 consultation to prevent jeopardy. See page II-8.

04-08 (continued)

3-NPCA re AZ Strip RMP/EIS draft

Tribal lands.

● Concerning oil-&-gas leasing, we favor a provision for no surface occupancy within ACEC's where the special resource values, for which these ACEC's are designated, can be assured of protection from oil-&-gas development activities.

● Regarding "Area B' guideline areas: with "Special stipulations...[regarding mineral development]...to maintain unique features and/or remoteness" in the B areas (Map II-1), we suggest that Alt. 2 appears adequate in the sensitive areas that are outside of established wilderness areas. It would also appear that such stipulations will probably include all those already being adhered to and practiced by Energy Fuels Nuclear, Inc., in that company's precedent-setting operations in the development and restoration of mineral exploration and mine sites on the Arizona Strip. That being the case, we suggest that some of the Alt. 3 "guideline areas" be included in the Preferred Alternative, as, for example, the Grand Wash Cliffs area between Grand Wash Cliffs Wilderness and Paiute Wilderness and Alt. 3's more comprehensive guideline areas adjacent to Lake Mead NRA. 3

Mining companies should all be held to the high performance standards achieved by EFN; so, designating these special stipulation guideline areas should prove no greater difficulty or challenge than is currently being practiced by EFN.

● Concerning designations: we support designating Paria Plateau as an SRMA; and as ACEC's: Beaver Dam, Virgin River, Little Black Mountain, Nampaweap, and Marble Canyon. We urge, however, that Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring (the latter three have sensitive, irreplaceable archaeological values) be carefully re-evaluated, to determine whether it is better, in terms of protecting these values, to simply apply the management prescription that would govern an ACEC, but not apply the ACEC label that is likely to attract too much public attention with resulting visitation impacts. We realize Little Black Mountain is another archaeological site, but --as is recommended under Alt. 2 and 3--that is an ideal one to offer archaeological interpretation, under ACEC status. 4

In both the ACEC's, and on those lands deliberately not designated as ACEC's (to not draw public attention to the sensitive resource values), we urge that mining plans of operation be required. We urge that such mining plans also be required on "Area B" guideline areas. 5

● Regarding Andrus/Dansil canyons and Parashant Canyon being determined ineligible for ACEC management, while we do not particularly disagree with this conclusion, we do urge that the rationale for this conclusion be expanded from merely a statement that "The scenic resource values in the BLM managed portion...are not particularly interesting and are not more than locally significant," or "The upper portions of Parashant Canyon do not have scenery unique to the Grand Canyon region." FLPMA and BLM's regulations do not limit the importance/relevancy of a potential ACEC unit to exceptional scenic quality or uniqueness. Other 6

3. The areas managed according to B guidelines have been expanded as shown on Map II-1 to include some visually sensitive areas in the St. George city view shed. Some of the land between Grand Wash Cliffs wilderness and Paiute wilderness are proposed for management under VRM Class II guidelines which would help preserve the areas natural scenic values.

4. These areas meet the relevance and importance criteria and include cultural resource values as well as endangered species. Due to their small size and present exposure, ACEC designations along with existing laws, regulations and law enforcement are needed for their protection and management. The ACEC designations would increase the public's awareness and deter vandals.

5. Under current regulations mining plans are only automatically required in ACECs and in OHV closed areas. The proposed RMP has expanded OHV closed areas in Parashant and Andrus Canyons in order to ensure adequate resource management.

6. We recognize that values other than scenery are included in relevance and importance considerations for ACEC designations. However, of the values outlined in 43 CFR 1610.7-2, and based on our database, only the scenic values may be of significance and apply in the case of Andrus, Dansil and Parashant Canyons. The majority of people coming to the Grand Canyon region would not seek out these three canyons to satisfy their outdoor experience. There are many

qualities, including worthy ecological, geological, botanical, & wildlife habitat, may also be solid reasons for determining eligibility or lack thereof. Further, a significant interrelationship with values on adjacent federal lands, as in a national park, taken together with the values on the BLM side of the line, might also constitute adequate rationale for an eligibility determination. 6

We urge, therefore, that the expressed rationale for Andrus/Dansil and Parashant canyons be expanded beyond merely "scenic" quality evaluations. The end recommendation may well be the same as appears under Alt. 2, but the broader range of qualities should nevertheless be included.

● Also regarding designations, we favor Alt. 3's designation of the Beaver Dam/Virgin River confluence area as a "riparian demonstration area," with a management demonstration plan for the approximately 120 acres. This action would be entirely consistent with other outstanding BLM riparian habitat protection and enhancement activities in Arizona, such as in the San Pedro Riparian National Conservation Area and in the Gila Box area. 7

● Concerning bighorn sheep and pronghorn management, we favor Alt. 2. The wording on page II-26 appears to be ideal, and we strongly support "monitoring studies to determine and adjust to optimum numbers consistent with habitat potential and other resource values," [emphasis added].

● Regarding forest/woodland resources: we support the proposed management under Alts. 2 & 3 for the relatively small but important ponderosa pine habitat on the Uinkaret, Parashant, and Black Rock Mountains areas. We agree that these tracts of ponderosa should be managed (under Category C) to emphasize ecological and recreational objectives. We suggest that the statement (p. II-23) under Management direction be slightly expanded by adding the words, "Ecologically based...," so the sentence then reads: "Ecologically based management practices could include...." We support the use of prescription burning (either naturally ignited or carefully planned man-ignited fires) as a vital element in the range of natural, ecological processes. We do agree that in certain instances--particularly because of the unnatural fuel accumulations brought about by many years of fire suppression--the fire program should be carefully, discretely supplemented by mechanical fuel reduction practices. These practices, in conjunction with the development of a fire matrix (with burn units of perhaps 25-250 acres or so) should help establish a less volatile fuels level, so that natural fires can then be generally allowed to burn without suppression efforts, as long as they burn within predetermined prescription parameters. 8

● Concerning the Kaibab squirrel, we believe the BLM and National Park Service ecologists should get together to discuss the best answer to the proposal (p. II-27) for possibly transplanting this species into ponderosa country at Parashant, adja- 9

more canyons in the Grand Canyon National Park or Lake Mead National Recreation Area that have significant and outstanding features superior to Andrus, Dansil and Parashant Canyons. Their scenic resource values are not more than locally significant and they do not possess scenery unique to the Grand Canyon region.

7. We concur. The proposed plan now includes a riparian demonstration area near the Beaver Dam/Virgin River confluence. See text change, Table II-1, page II-18.

8. BLM concurs with the suggestions and they have been incorporated into the planned action regarding forest management (see Table II-1, page II-20).

9. See response 02-06-17.

04-08 (continued)

cent to Lake Mead NRA. There may be legitimate concerns that the squirrel never previously occupied this area of the Strip and should, therefore, not be introduced there now. On the other hand, it may not be possible to reasonably determine whether this species previously lived there; in which case, it might prove compellingly arguable that (re)introduction could be a benefit to the squirrel to expand its limited range farther westward along the northern side of the Grand Canyon. It could also be viewed as adding interest to the visitor experience in the Parashant area.

● We fully support the document's suggestion (p. II-33) that the BLM's portion of the Paria River in Arizona merits being classified as a wild-&-scenic river. It is absolutely deserving of this special status under the Wild-&-Scenic River System. We would also agree that the Virgin River in Arizona could be classified as "wild" from the Utah state line to the first I-15 freeway bridge; as "scenic" from there down to the BLM's Virgin River Campground; and as "recreational" from there to at least the mouth of the Virgin River Canyon, and perhaps on to the Nevada state line.

● We agree with the "Improvement areas" objective under Alts. 2 & 3 (p. II-34): "Activities that would cause adverse long-term impacts to the important visual resources in the following areas would be prohibited or the impact mitigated to the extent possible: Hurricane [Cliffs]; Upper and Lower Grand Wash Cliffs; Diamond Butte; Moccasin Mountain; Andrus, Parashant, Grama and Kanab Creek Canyons."

● Concerning existing roads: we strongly agree that the BLM should "Close and rehabilitate existing roads where no public or administrative needs exist [we would add the word, 'justifiable'-'where no justifiable public or administrative needs exist'] in areas where closed to OHVs or where OHVs are limited to designated roads and trails. Reclaim newly constructed access upon termination of the specific need," as has been so successfully done to some former EFN access roads. 10

10. We concur, see text change, page II-34.

● Regarding the Virgin River Corridor, we support acquisition of lands with riparian or other high resource values when opportunities arise (with the help of The Nature Conservancy, if needed); and the continued withdrawal of the gorge from mineral location.

● One final aspect of the document that National Parks and Conservation Association wants to comment on concerns the interrelationship of the BLM's Arizona Strip District's ecological values (air, water, watershed, soil, flora, wildlife habitat), remoteness, public uses and access, cultural resources, and BLM's resource management, with the adjacent Grand Canyon National Park and Lake Mead National Recreational Area.

While we believe the draft RMP/EIS quite well recognizes these kinds of interrelationship realities, in terms of the actual manage-

04-08 (continued)

6-NPCA re AZ Strip RMP/EIS draft

ment prescription proposals, we do feel the document should be strengthened by acknowledging and articulating these interrelationships--as, for example, mentioning that certain BLM lands comprise watershed lands leading onto NPS lands, wildlife habitat that encompasses lands on both BLM and NPS sides of the line, and that BLM lands contain certain topographical/geological features that are within the view of visitors on NPS lands. Quite a few of the proposed management objectives of the RMP will benefit the adjacent NPS lands, and these should be indicated. Some actions may have the potential for detrimental impacts on the adjacent park or recreation area. They should be mentioned. If there are ways to mitigate those potential impacts, these should be described. And if there appear to be irreconcilable conflicts between certain BLM or BLM permitted activities and the objectives and resources on NPS lands, we urge that such irreconcilability also be clearly indicated. | 11

FLPMA and BLM planning regulations are explicit in requiring BLM to attempt to achieve "consistency" between its own RMP and the plans and objectives of adjacent federal land managing agencies.

One key area that can have a significant impact upon adjacent federal lands is the presence of roads that lead from BLM onto NPS lands. We urge that the section on roads (the closure of some and the continued open status for others) be at least succinctly evaluated as to the interrelationship with the NPS lands. We recognize BLM, in cooperation with the National Park Service, has already--commendably--closed a number of roads/ways leading from BLM to NPS lands. This fact should also be mentioned in the document.

It may well be that such articulation of interrelationships and interrelationship impacts will not result in any substantive changes in the document's proposed actions by BLM. Yet, we urge that such descriptions of the interrelationship theme be included wherever appropriate throughout the document and in a separate section on the subject.

Finally, we understand there has been a nomination for ACEC status of the Kanab Creek area. We urge that the area from the confluence with Snake Gulch north to "Bullrush" is an excellent ACEC candidate. | 12

Again our thanks for this opportunity to offer our comments and our congratulations on such an excellent document.

~~With best~~ regards,

Russell D. Butcher
Southwest-&-California Representative
National Parks and Conservation Association

04-08 (continued)

11. A new subsection has been added to Chapter IV called "Impacts to Adjoining Lands". This section describes the impacts of BLM's management on adjoining National Park Service land.

12. Kanab Creek was thoroughly considered by the wilderness coalition and by Congress in the Arizona Wilderness Act of 1984 (Public Law 98-406). Congress designated 77,100 acres as the Kanab Creek wilderness, then stated that lands "not designated as wilderness by this Act have been adequately studied for wilderness designation." It was the intent of Congress that lands unsuitable for wilderness designation be returned to multiple use management.

Our proposed plan is to close Grama Canyon and Kanab Creek (north of Snake Gulch) and limit OHV to designated roads and trails in the remainder of Hacks Canyon that is not designated as wilderness.

The remainder of Kanab Creek outside of the Grand Canyon National Park boundary and not designated as wilderness does not meet the relevance and importance criteria for an ACEC. The text in Appendix 6 has been modified.

04-09

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St., George, Utah 84770

Dear Mr. Curtis:

I am employed by Energy Fuels, a mining company that operates several uranium mines in the Arizona Strip District. I have the following comments on the draft Resource Management Plan for the Arizona Strip District.

First, I believe that Energy Fuels' track record at the Hack Canyon mines demonstrates that mineral resources can be developed in the District with minimal disturbance of the environment and with significant economic benefits to the local communities. The company and its employees are committed to exploration and development in a manner that has been clearly shown to have only limited, short term impacts. BLM does not need to impose area-wide restrictions on mineral development to ensure that it is done properly. I recommend that you adopt Alternative 1, or at the very most, Alternative 4.

Second, the RMP underemphasizes the importance of economic development, particularly mineral development, and overemphasizes additional restrictions to promote "remote" recreational experiences. As a local resident it is obvious that additional restrictions are not necessary to promote recreation. We are literally surrounded by national parks, recreation areas, wilderness areas, Indian reservations, game preserves and other federal lands upon which development may not occur. BLM should show a greater appreciation for the value of managing the remaining federal lands under its jurisdiction for multiple use.

Finally, BLM should not use the land use planning process to accomplish what Congress was unwilling to do in 1984. The wilderness study areas that were returned to multiple use under the Arizona Wilderness Act should not now be managed principally to protect their "remoteness". That is, for all practical purposes, the same as making them wilderness areas. The breccia pipe deposits in the District are a unique resource of national significance. BLM should do its part to see that such resources are properly developed. It should clarify that the RMP is not intended to preclude mineral development, except in areas that are specifically proposed for withdrawals.

Sincerely,

Kenneth V. Palmer
P.O. Box 1117
Kanab, Utah 84741

V-77



04-10

DIXIE WILDLIFE FEDERATION
P.O. BOX 683 / ST. GEORGE, UTAH 84770

10 April 1990

Mr. Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Thank you for the opportunity to comment on the draft Arizona Strip RMP/EIS. In reviewing the draft RMP/EIS the following wildlife resource concerns are forwarded:

a. Land Resource: Alternative 3 (p. II-9) that retains all desert tortoise habitat essential for tortoise survival should be adopted. This would allow for exchange of low quality and low density desert tortoise habitat. At a minimum, a retention policy for category 1 and 2 desert tortoise habitat should be specified. This would be consistent with objective 7 of the Rangewide Plan for Management of the Desert Tortoise on the Public Lands. Category 3 desert tortoise habitat should be evaluated on a case-by-case basis.

The term "neutral for the tortoise" under the preferred alternative (p. II-9) provides considerable latitude for the disposal of land in tortoise habitat. For example, it could be interpreted that tortoise relocation to low tortoise population density area that is considered potential habitat could justify disposal of category 1 or 2 habitat to accommodate development. Even though very little land is identified for exchange or sale (Map II-4), land disposal is of special concern in the Littlefield area. | 1

b. Mineral Resource Oil and Gas. Alternative 3 (p. II-13) no surface occupancy for desert tortoise protection should replace seasonal restriction (p. II-12) adopted under the preferred alternative. In addition to the Beaver Dam Slope ACEC, the remainder of category 1 and 2 desert tortoise habitat should be added to the NSO stipulation. Desert tortoise population densities >20 should be considered appropriate for NSO protection. | 2

Map III-1 identifies O&G resource potential as moderate in desert tortoise habitat. Even though the RMP suggests that there may not be any exploration during the life of this RMP, exploration or development can not be

1. Prior to completion of any land exchange involving possible desert tortoise habitat, Section 7 consultation will be done to assure a net effect that is positive for the tortoise in accordance with the Endangered Species Act (see page II-5).

2. The reference on page II-12 in the draft RMP/EIS regarding seasonal restrictions being applied to oil and gas leases for the protection of desert tortoise habitat was in error and has been deleted.

discounted. If economic conditions favor exploration or development of moderate O&G reserves, exploration impacts alone could have a devastating affect on an already over-stressed Arizona Strip desert tortoise population. If a discovery was made, the cumulative impact of 5 to 10 acre development areas with associated roads could be extremely detrimental to tortoise recovery.

Since desert tortoise habitat is in Area A (Map II-1), it is anticipated that reclamation of roads or O&G pads may not occur. Even if reclamation was specified, reclamation effectiveness under fragile desert environmental condition is highly suspect. For example utilizing an area on the upper Beaver Dam Slope that appears to be an old drill pad site, it appears reclamation would be extremely difficult. There is virtually no vegetation regeneration after 5 years of observation.

Under locatable minerals (p. III-6), vegetation recovery after land disturbance on the Arizona Strip can take between 5 and 10 years. For the desert environment occupied by the desert tortoise, the 5 to 10 year vegetative recovery timetable is probably misleading. An expected vegetative recovery time for desert environmental extremes needs clarification in the final RMP. The lack of vegetative response to disturbance, should be considered additional justification for NSO on tortoise habitat.

V-79

c. Mineral Resource - Mining Law. The praferred alternative (p. II-13) should reflect that desert tortoise habitat with a density of >20 (Category 1 and 2) will be closed to minaral antry. This would be consistent with "Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan" management action 14A. "Closed to mineral entry" would probably have little impact on existing mining claims. 3

Even though there is a moderate potential for gold (p. III-4), a gold cyanida leaching operation within category I or 2 desert tortoise habitat can not be discounted. Because cyanide leaching operations can require up to 200 acres or more plus road access acreage, one operation or a combination of operations has the potential to drastically impact tortoise recovery effort. This requirement for a relatively high acreage for mining operation plus the uncertainty of vegetative recovery after operation has serious implication of the Strip's ability to manage for desert tortoise when faced with possibility of mining law implementation.

Therefore, the potential impact Mining Law free-access and patent provision could have on management necessary for desert tortoise recovery need to be clearly addressed under "Impacts to Special Status Species" (p. IV-35). In Leshy's "The Mining Law" (1987), patent of land necessary for mining is not discretionary once Mining Law requiremants are met. If this is the case, it is interpreted that the loss of 4

04-10 (continued)

3 The withdrawal of tortoise habitat from mineral entry was presented and analyzed in Alternative 3 of the draft RMP/EIS. Under the preferred alternative, the Beaver Dam Slope ACEC would be closed to OHV use. As a result, any exploration or development proposal utilizing motorized vehicles as a form of access would require prior bureau approval of a plan of operation. Approval of a plan of operation is a federal action requiring consultation with the U. S. Fish and Wildlife Service where such actions may affect threatened or endangered species. Through this process, the bureau, in consultation with the U. S. Fish and Wildlife Service, assures that approval of the action would not likely jeopardize the continued existence of any listed species or result in the adverse modification of critical habitat. If the approval of any action would not fulfill the requirements of the Endangered Species Act, the action would not be approved. Based on this analysis, the withdrawal of tortoise habitat in the Beaver Dam ACEC is not justified.

Management action 14a of the Desert Tortoise Rangewide Plan recommends considering the withdrawal of category 1 tortoise habitat areas. The draft RMP/EIS is consistent with this recommendation as a withdrawal of category 1 and 2 areas were considered in the draft plan.

4. Upon satisfaction of the requirements of the law, the owner of a valid mining claim has the right to a patent from the United States conveying fee title to the land contained within the claim. The actions taken by the Secretary of the Interior in processing an application for patent are not discretionary. Even though the owner of an unpatented mining claim does have the right to patent under the law, this right is applicable only in those cases where a valid mining claim is supported by the discovery of a valuable mineral deposit. The requirements of discovery are stringent, and in fact very few mining claim patents are issued by the bureau each year. Since 1976, mineral patents for only 127 mining claims have been issued by the bureau in the State of Arizona. This number represents less than one tenth of one percent of the total number of claims in the state of Arizona. Given the stringent requirements for mineral patent and the mineral resource potential of the category one and two desert tortoise areas, it is unlikely that mineral patents would be issued in these areas during the life of the plan. Under the preferred alternative, exploration to discover mineral resources in this area would be permitted to the extent that it is compatible with the provisions of the Endangered Species Act.

04-10 (continued)

category 1 or 2 desert tortoise habitat could occur. It is also not clear if the Endangered Species Act provides the statutory mechanism necessary for habitat protection. It may be appropriate for the final RMP/EIS to address the interaction between mining law and the Endangered Species act.

Area B designation under alternative 3 (p. II-13) should be adopted under the preferred alternative for desert tortoise habitat. As a threatened species, the desert tortoise should qualify as a unique resource value with special management requirements. Under the current RMP Area A designation, there is too much management latitude that may may be counter productive to tortoise management. For example, it is interpreted that new roads for exploration or range improvement projects may be authorized. This would add to access availability which would undoubtedly create an additional burden to the desert tortoise. Therefore, pertinent portions of the "Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan that relate to mineral development and add protective measures for the tortoise should be added to the final RMP/EIS. It should be noted that mitigation measures that relate to vegetative rehabilitation would be highly suspect. As noted, vegetative treatment may not be effective. 5

d. Watershed - Water Resource. In addition to Mining Law adverse impact on sound land management, the failure to attain water rights necessary to meet management objectives could be devastating in meeting RMP stated objectives. Under "Watershed" (p. II-17) it states the Strip will file for water rights under state law. If water right attainment is similar to Utah, water rights necessary to perform land management activities may be extremely difficult to attain. This is especially true for riparian management and maintenance of spring and seep necessary for wildlife. 6

Because water rights are a key element necessary to meet management needs, the Strip and the Bureau has an obligation to address the water right issue beyond just filing for water rights if intent of preferred alternative for riparian, spring, and seep management is to be realized. The final RMP/EIS should address additional steps being taken to attain water rights beyond just filing. 7

Because water rights availability may not be adequate to meet management need, the final RMP should establish a policy that promotes cooperative development of seeps and springs for wildlife. And, provides a mechanism to maintain water flows in riparian areas. The exchange of public land access for water available for wildlife and public use seems a reasonable compromise in meeting public land wildlife and riparian and recreational objectives in the absence of State recognition or low priority assignment of water rights for Bureau related objectives.

04-10 (continued)

5. The proposed RMP states that 38,800 acres be designated and managed as Category 1 habitat, 71,700 acres as Category II and 214,200 acres as Category III. Category definitions and management objectives are found in the Rangewide Plan for Desert Tortoise Habitat Management (see Appendix 16 and page III-10 in the final RMP/EIS. Therefore the proposed RMP includes the most pertinent portions of this plan.

6. The BLM is aggressive in filing for water rights at the source. All filings and developments are evaluated in EAs for their impacts on riparian areas and for their multiple use values.

   Springs and seeps are being inventoried by an interdisciplinary team to determine their existing soil, water, fauna and flora, current condition, and potential. Riparian management plans need to be developed by the team. Pre-plan and post-plan monitoring are needed to assess the effects.

7. A common practice of BLM is to work with and encourage individuals who have water rights to make water available for wildlife and riparian values. Sometimes these conditions become part of the conditions of a right-of-way grant.

It is recognized that there are many water rights holders that cooperate with BLM. But as the demand for relatively small sources of water (seeps & springs) intensify voluntary agreement may not be easily attained. Therefore it may be appropriate that the preferred alternative (p. II-17) establish a policy of cooperation to ensure water is available for wildlife, livestock, and recreational purposes. It should be policy that use of public access to develop water should not be at the expense of other public such as wildlife. 8

e. Special Status Species - Desert Tortoise. In addition to concerns mentioned under items a, b and c above, the alternative to allow activities between November 1 and February 15 that may have adverse impact on desert tortoise habitat (p. II-20) may provide development opportunity. But, at time when the lose of any desert tortoise habitat may be critical to the very existence of the animal, adverse impact especially in category 1 and 2 habitat has to be seriously questioned. This is especially true when it is likely adverse impacts will occur on late spring and summer concentration areas. The inability of vegetation to respond to reclamation projects makes adverse encroachment extremely unattractive to a sound desert tortoise management strategy. 9

f. Riperian. Under the preferred alternative, the riparian ACEC is highly supported. It is unclear if the proposed ACEC would include riparian acreage along the Beaver Dam/Virgin River confluence. Hopefully, it does. The alternative 3 proposal of a riparian demonstration area at the Beaver Dam/Virgin River confluence may be a excellent idea. Such a demonstration area may fit into a community overall development plan and provide the Strip with an opportunity to demonstrate commitment to riparian management. However there is a concern that a riparian demonstration area may increase human traffic into the area. This may adversely affect the Common Black Hawk that may nest in the area. Then there is the possibility a fenced riparian demonstration area may be the only alternative to protect the riperian resource from increased adverse impact due to Littlefield area growth. 10 11

As mentioned under item d, the non-availability of water rights to protect instream flow could have a drastic effect on riparian management. Without a push by the Strip and the Bureau to obtain necessary instream flow protection, the potential for a sound riparian management policy will remain a question mark.

The impact Mining Law free-access and patent provision could have on riparian area should be addressed. If patent is applied for and includes sections of riparian habitat, how will the riparian resource be protected? 12

g. Grazing Management. The preferred alternative (p. II-25) implies that AMP's will be the managing document for livestock on desert tortoise range. In reviewing the

04-10 (continued)

8. Impacts of constructing access across public lands to develop private waters are analyzed in an environmental assessment. Mitigation is developed to off-set adverse impacts and is included in the project approval document as stipulations. This is BLM policy.

9. Section 7 consultation with the U. S. Fish and Wildlife Service will be conducted on any action that may affect tortoises. Standard mitigation and consultation recommendations will prevent significant adverse impacts. Restrictions on activities from February 15 to October 31 is another dimension of insurance to protect animals during their most active period.

10. The Virgin River ACEC identified in both Alternative 2 and 3 includes the area of the Virgin River/Beaver Dam confluence.

11. A riparian demonstration plan is at the activity plan level and would be approved only after an EA was completed. A riparian demonstration plan requires consideration for wildlife, including protection and objectives to enhance wildlife habitat elements. Human traffic may adversely affect nesting of the common black hawk, an Arizona listed candidate species. Considerable human activity is already evident in this area, being in close proximity to the Beaver Dam community resort and golf course. Any impacts to wildlife would be mitigated.

12. See comment response 04-10-04.

04-10 (continued)

Beever Dam Slope AMP, it appeers the livestock menegement scheme esteblished mey be appropriete for yeers of good forege production. It appeers trend for key perenniel shrubs end grasses is improving. However the estelished grezing systems beseed on e utilizetion leval of 50% mey be inedequete during dry yeers. This mey be especielly true, when spring grezing is scheduled three yeers in e row during en extended drought period. As is the case with the Beever Dam Slope ellotment.

If during dry yeers grezing is authorized, even et reduced levels, end the 50% forege utilizetion is reteined, increesed livestock pressure on eveilable ennuels needed for tortoise mey preclude etteinment of 50% forege utilizetion level. Since there is en sense that ennuels ere extremely importent to the spring diet of the tortoise, dry yeer use by cettle mey be contributing to suspected tortoise nutritionel deficiency. Increesed pressure on ennuels becomes especially significent if nutritionel deficiency is linked to the fetel upper respirstory trect diseese (URTD). A recent study by Dr. Elliott R. Jecobson end Dr. Jeck M. Geskin form the College of Veterinery Medicine, University of Flordie, indicates thet tortoise melnutrition could very well be connected to URDT beceuse of immunosuppression. Immunosuppression it eppeers is directly linked to melnutrition.

Beceuse mounting evidence does suggest thet melnutrition is directly linked to tortoise populetion viebility, e grezing system beseed on ennuel vegetetion needs to be edopted for dry yeers. Because there has been consjderable work done by the Dixie RA in conjunction with range professionels, the USFWS, the annual vegetetion policy established should be edopted es pert of the finel RMP/EIS.

The Dixie RA ennuel vegetetion policy specifies "no grezing from Merch 1 - Mey 31 when ennuel forege production is <200 lbs/ecre" end "Grezing permitted from November to the end of Mey when forege production is >300 lbs/ecre. It is highly possible when ennusl production is below 200 lbs/ecre vigor of perenniel plents is elso reduced. Perenniel gress loss of vigor mey reduce nutritionel velue needed by the tortoise during lets spring, summer end fell grezing period.

h. Wildlife Resource - HMP. Under "Menegement Guidence Common to All Alternetives" (p. II-26), it eppeers thet wildlife menegement policy will plece considerable of emphesis on HMP's. In reviewing the Perie-Kenab end Mt. Trumbull HMP's, these HMP's eppeered out of dete. It is believed the remeining HMP's mey elso be out of date. It eppeers meny of the wildlife projects specified heve been completed. It is noted thet HMP's heve no biologicel essessment section either to determine why objective were not ettsined or what impacts may be expected from lend menegement ection.

If HMP's ere the basis for wildlife menegement policy, it

13

14

15

04-10 (continued)

13. The Beaver Dam Slope allotment has not reached the 50 percent utilization level in recent years. Even though the allotment is used every spring, a rotation system is in place that gives rest from grazing to one of the three pastures during the growing season. That rest period rotates through the pastures. So the whole allotment is not used every spring, only one or two of the pastures.

14. The BLM will consult with the USFWS under Section 7 of the Endangered Species Act on our ongoing livestock grazing management in desert tortoise habitat. Information on grazing practices and vegetation data will be developed and analyzed in conjunction with tortoise habitat and occurrence data. We will adjust management as necessary to follow the terms and conditions of the biological opinion.

    In addition, we have been and will continue to implement, measures favoring desert tortoise forage and habitat improvement in allotment management plans.

15. It is BLM policy that all new HMPs and major changes in existing HMPs be evaluated in EAs. EAs are also written on actions authorized by BLM affecting the

would seem appropriate that a interdisciplinary biological evaluation of anticipated impacts to wildlife habitat resource due to mineral exploration or development, recreational activity, or livestock grazing would be essential element of any habitat management plan. For an example, it is common to read in non-renewable resource EA's - wildlife will be temporarily dispersed. Depending on the habitat involved and impact from cumulative resource exploration or extraction, the wildlife resource could be seriously impacted without knowledge that an impact was occurring or possible. It should be known in advance what degree of adverse impact wildlife can tolerate. This can only be accomplished through a biological assessment at time of HMP development.

Biological assessment analyzing degree of impact wildlife can absorb would seem especially important for crucial habitats. Wildlife biological assessment would seem especially appropriate for mule deer high concentration winter areas such as Buckskin and Gunsight Point. It is highly conceivable, that increase development oriented activity may have a negative impact, either through increased wildlife harassment or forced movement which increases impact on diminished wildlife forage base. It should be noted that many feel deer can be easily displaced without adverse impact to overall density. However, deer are creatures of habitat which may be especially applicable in returning to winter range. This may be overlooked in management decision making. 15

On page II-24 there is mention of a Waterfowl and Raptor HMP. These HMP's may not have been implemented. This needs to be clarified. These HMP's were not available at the Vermillion RA when HMP review was made. 16

i. Wildlife Resource - Mule Deer. In comparing Map II-1 and Map III-19, it appears that crucial mule deer habitat from Gunsight Point north is under Area A management. This seems to imply that new road access will be authorized into the area. The conclusion is that these new roads not be reclaimed after use is terminated. Is this the case? Since crucial habitats are considered extremely important to the stability of Arizona Strip deer herd, it would be appropriate for the final RMP/EIS to acknowledge that no new roads into deer crucial areas will be authorized on a permanent basis. At the very least HMP's should so stipulate. It would seem appropriate that high use deer winter range should be managed under Area B criteria. 17

In reviewing several RMP's from other Resource Areas, there is a recognition of the importance of critical winter range. This recognition appears to be absent from this draft RMP/EIS and current HMP's. Because of the value placed on deer crucial winter range by other land managers a seasonal stipulation - November 1 through April 15 - has been adopted to restrict exploration or development activity. This is to 18

04-10 (continued)

existing environment. These actions could include mining plan approval, range improvements, powerline rights-of-ways, etc. Through this process all significant impacts affecting wildlife would be evaluated.

16. Corrections made, page II-26.

17. Specific road and trail construction standards are determined based on consideration of resource management needs. These include user safety and impacts to environmental values, wildlife habitat, soil stability, recreation, visual resources and construction/maintenance costs. New roads may be created to access resource development but must be rehabilitated upon completion of the need for the road. The analysis of impacts from the construction of a road into deer crucial habitat would occur during the EA review process. Subsequent approval or disapproval of the project would result.

18. We also recognize the importance of crucial deer winter range. Mule deer are generally not as prone to be affected by small scale operations during the winter period. Site-specific mitigation is developed through HMP implementation and the EA process. Areas which support significant deer numbers would receive particular attention.

04-10 (continued)

prevant undue stress on deer during thair critical winter period. There is a exception thet authorizes exploretion or development activity if deer use is minimel during the November 1 - April 15 time-frame. This seasonal stipulation is e reasonable epproech to deer manegement while meeting the need of development. Seesonal activity restriction is aspecially importent in high deer use concentration erass. The Arizone Strip should consider crucial deer winter range seesonal stipulation and include it under "Isaue/Resource: Wildlife Resources, final RMP/EIS.

HMP mule deer objective for Gunsight Point not included in Appendix 17 (p. A57). Par Paria-Kenab HMP, Gunsight Point objective should read "Increase the resident deer herd from 180 deer (1 deer/section) to 360 deer (2 deer/section)".

HMP mula deer objective for Mt. Trumbull HMP in Appendix 17 (p. A57) should read "fawn survivel from 30 to 75/100 doe by 1996".

As noted though out the above comments, there is e sanse that the draft RMP/EIS does not eddresa the tortoise issue adaquately. Plecemant of tortoise hebitat under Araa A manegement guidelines signals a reduced commitment to this speciai interest spacies. It is e strong belief that applicable management objectives from the "Desart Tortoise Habitet Menagement on tha Public Lands: A Rengewide Plen" should be made pert of the RMP. It is believed, the tortoisa rengewide plen should not be used es e secondary reference sourca. The tortoise situation will undoubtedly be around for the life of this RMP/EIS. Therefore, e stronger manegement emphasis should be part of the final RMP/EIS.

Respectfully,

Cordell Peterson.

L. Cordell Peterson
Non-game Coordinator

cc: Arizona Wildlife Federation

19

04-10 (continued)

19. Corrections made, page A-53.

1220 W. Las Lomitas
Tucson, AZ. 85704
27 March 1990

Mr. Dennis Curtis
BUREAU OF LAND MANAGEMENT
Arizona Strip District
390 N. 3050 E.
St. George, Utah 84770

Re: Ariz.Strip
RMP/EIS

Greetings Mr. Curtis:

This will acknowledge and thank you for the above mentioned document and the opportunity as a citizen to voice my opinion and suggestions in the management of our national heritage, Federal Land.

My suggestions/comments/questions will be directed by page number.

1. Page III-2 /airports. I recommend:
   A. No additional airports be permitted in the district for this plan.
   B. Remove/obliterate those that are used very little or not at all. (e.g. Toroweap, Whitmore, Cliff Dwellers, Pakoon)
   C. Restrict development of the remaining airports with exception of Colorado City and Page.
   D. Airports should be operated on public land by private enterprise to assure a profitable operation. If they cannot be operated profitably they should not be built.
2. Page III-2 /ROW corridors.
   A. Shivwits Resource area has a 2 mile wide corridor and Vermillion has a 2000 foot corridor. Why not standardize on maximum 2000 foot corridor?? | 1
3. Page III-3-10 /Oil & gas exploration.
   A. Of the 43 wells drilled for gas & oil, NONE have encountered either product in paying quantities. How many additional exploratory holes must be drilled before the final determination is reached?? | 2
4. Page III-3-10 /Minerals.
   A. It appears that uranium is currently the "hot" item in the district in Breccia pipe deposits. III-5 states that two mines are in operation and three in various stages of development. Due to the haul truck traffic and related pollution inherent with unpaved roads I recommend that a limit be placed on the number of mines in operatation. In connection with the current mining operations I would like to

04-11

1. Corridor widths would be standardized with the proposed one-mile-wide corridor through both the Vermillion and Shivwits Resource Areas except for a one-half mile wide corridor across Ferry Swale and that portion through the desert tortoise habitat where individual right-of-way applications would be analyzed on a case-by-case basis to reduce impacts on the tortoise.

2. The number of exploratory wells required to determine that an oil or gas mineral resource does not occur within a particular area depends on several factors: size of the area, the geologic complexities, the available technology, and the pricing structure.

make the following recommendations regarding the haul trucks:

1. Every effort should be made to keep the dust clouds that follow the haul trucks to a minimum. Any dust abatement method that is used should be at the sole expense of the mining company. It is unfair to the taxpayers to use tax dollars to build and maintain haul roads for private enterprise to make a profit. Let the user pay.
2. Determine if the contractors/mining company's haul trucks are paying fuel taxes via fuel vendors pumps or if they are having fuel hauled to the jobsite as tax exempt industrial fuel. If fuel tax is not being paid, it is grossly unfair to the taxpaying public.
3. Is there any financial protection for bankrupt mining companies?? e.g. Who does the reclamation of a mine site in the event of a bankruptcy?? I recommend the mining company/contractor post a bond to cover the reclamation work.

3

B. I commend EFN for the outstanding reclamation job done at Hack Canyon. I trust subsequent reclamation will be equal.

5. Page III-11-12 /Cultural resources.
   A. Cultural resources should be protected under all conditions as follows:
      1. Do not publicize locations of the sites. Information concerning location should be available only to archaeologists and responsible persons wishing to study or photograph same.
      2. Where possible, major sites should be limited to "permit" visitation only.
6. Page III-15 /Water quality.
   A. Water quality should be protected/guarded meticulously.
      1. Special attention should be given to the mining operations in the area where toxic chemicals are in use for leaching or cleaning purposes.
7. Page III-15 & 16 /Air resource.
   A. Burning landfills should be prohibited.
8. Page III-24 /Burros.
   A. Burros competing with Big Horn Sheep for forage and water should be eliminated.
      1. Uncontrolled proliferation of burros should not be permitted. These animals should be harvested the same as any other and their numbers controlled.

04-11 (continued)

3. At the present time, the authorized officer of the bureau may require a reclamation bond of operators or claimants operating under a plan of operation.

04-11 (continued)

Az. Strip Page #3.

9. Page III-32 /Transportation/Access/Roads.
   A. The current paved access to the Strip District is adequate. Additional paved roads into these remote areas promotes garbage dumping and added traffic. Above all, the road to Toroweap should remain unpaved.
   B. Areas near communities should be designated for OHV use. OHV use should be prohibited in any other areas due to the severe damage they do to the delicate desert areas.
   C. Where possible, the existing roads should be properly signed for those desiring to find a given area. What is the annual cost for maintaining the signs in the Strip District??? It must be excessively high due to the vandalism and theft. | 4
10. General comments.
   A. The Virgin River Scenic Area and the Vermillion Cliffs Natural Area should not only retain these designations they should be classed as ACEC's. | 5

Sincerely,

Gene I. Wendt

GIW/giw
File 390AZST

V-87

4. We are continually improving and replacing road signs as funds are made available. A road numbering system tied to a recreation visitor map is currently being implemented. Over $5,000 per year is currently spent maintaining signs.

5. Most of the Virgin River scenic area and the Vermillion Cliffs Natural Area are included in the Paiute/Beaver Dam Wilderness Area and the Vermillion Cliffs/ Paria Canyon Wilderness Areas respectively. The remainder of the Virgin River scenic area is included in the proposed Virgin River Corridor ACEC.

   The Vermillion Cliffs Natural Area does not meet the relevance and importance criteria outlined in 43 CFR 1610.7-2 for ACEC designation, but the natural area designation and associated withdrawal are included in the proposed RMP.

04-12

Page Ref. Comments on the BLM's Resource Management Plan Draft for the Arizona Strip

I. We feel that the range of alternatives is skewed towards consumptive uses of the area's resources, as opposed to conservation for the following reasons:

A. Alternatives #2 and #3 are very similar

1. Same acreage of ACEC's.

S-15 2. Alternative #3 confuses recreational and environmental concerns. These two uses are contradictory in some ways. For example, increased visitor use could have a negative impact on wildlife.

S-20 3. Surface disturbance difference between #2 and #3 = 25 ac.

B. More ACEC's or B areas were recommended by the public to encompass the area adjacent to Grand Canyon National Park's northern border. If Alternative #3 were really an environmental alternative, it would include these recommendations by the public. | 1

S-4 S-5 C. In Alternative #2 vs Alternative #3: 445,210 ac -Alternative #2 Special Management Areas; 452,800 ac - Alternative #3 Special Management Areas. This is not a significant difference in acreage compared to 2.8 million total acreage.

II. Some general comments are:

A. We would like to see all of the public's comments published and responded to. (Does this happen anywhere in the BLM's RMP process?) | 2

B. The range of possible management practices are not fully explained for the public to evaluate.

II-29 C. In many places all recreational activities are lumped together, i.e., ORV's sight-seeing, backpacking, trapping, etc. In spite of Appendix 20, which defines ROS classes, each alternative should clearly distinguish between high and low impact recreation activities. | 3

PRESCOTT AUDUBON SOCIETY

D. We are pleased that the BLM is not recommending the Ferryswale airport proposal.

E. The maps in the Draft RMP were of such poor quality that they were useless. Landmarks, roads, etc. should be included, in order to accurately access what practices are being considered in what areas. | 4

1. See general response to public comments page V-8.

2. The records of our Scoping and Issue identification activities are available for review in the district office. This final RMP/EIS includes copies of all public comments received on the draft along with our responses to all substantive comments.

3. Most recreational activities occurring on the Strip are low impact. A major objective of the plan is to manage most of the Strip for extensive recreation. Exceptions to this are OHV use areas and developed campgrounds. OHV designations are described in Table II-1, page II-32 and on Map II-15. The only developed campground on the district is Cedar Pocket in the Virgin River Gorge; no new developed campgrounds are planned.

4. A new set of maps with township lines and other locators has been prepared for the final RMP/EIS.

04-12 (continued)

Page Ref.

(The maps on E.A.'s for individual mines have been better than these maps.

F. We feel it's better to keep the 200 ft. right-of-way on the Paria Plateau, than to have one mile-wide right-of-way, as is suggested.

Table III-29

G. The tourist trade is being undervalued on the Arizona Strip. User days should be given a dollar value, in order to accurately assess the tourists' and recreational users' effects on the local economy. According to the BLM's data (Table III-29), only 1-2% of the area's income is derived from mining, for local residents. 5

H. All right-of-ways should be located in areas where it doesn't interfere with scenic value.

I. The terms "desirable plant community", "undesirable plant community" and "stagnant community" are used in the draft RMP without being defined. A "desirable plant community" should consist of native plant species and exclude introduced species. Every effort should be made to restore plant communities to their original condition with native plant species. Vegetative treatments or conversion should be undertaken with this ultimate goal in mind. 6

J. Spraying for grasshoppers or other insects should not be considered. The long-term benefit is doubtful, the chemicals are hazardous to other living organisms and the natural balance is upset.

K. Care should be taken to maintain the primitive and remote character of the area. Improving visitor services should only consist of signing the more heavily used roads. Other information could be included on the area's visitor maps, and not in the field in Paria, the Vermillion Cliffs Natural Area, and the Parashant area.

III. We are concerned over the lack of documentation and coordination with Grand Canyon National Park. According to the BLM Manual, they are mandated to coordinate with other Federal State agencies whose land is adjacent to BLM lands.

A. The BLM should respond to the official stance of the Grand Canyon National Park Service since they request Alternative #3 instead of the BLM's preferred Alternative #2. We were told that the Grand Canyon National Park Service also feels that Kanab Creek should be designated as an ACEC area.

5. We agree that recreation and tourism are important values on the Arizona Strip. Table III-21 has been changed to reflect these values.

6. Definitions of "desirable plant community", "undesirable plant community" and "stagnant community" have been added to the glossary.

04-12 (continued)

Page Ref.

B. The remote and primitive qualities of land adjacent to the Grand Canyon should be maintained. By law, the BLM is mandated to maintain the special values of land adjacent to the Park.

IV. We believe the following areas should be included under ACEC designation; or deserve some special consideration.

A. Kanab Creek should definitely receive ACEC status, in spite of the BLM's rationale for dropping it. The Grand Canyon National Park Service feels it should be an ACEC, and the BLM should coordinate with the Park Service. Kanab Creek contains riparian lands, it has dramatic canyon scenery which is very different from much of the Arizona Strip, and Peregrine Falcon inhabit Kanab Creek. Kanab Creek is also rich in archeological sites - and further surveys should be done to protect and identify more sites. 7

B. The lower part of House Rock Valley should be included as a B area. Visually, the area as a whole is important, and it also should be designated as Class II air quality. Highway 89A through House Rock Valley should be a scenic highway. (How does the BLM plan to protect the scenic by-ways?) All power lines in House Rock Valley should be buried. 8

C. The Witch's Pool area is known to be rich in archeological sites and therefore 1,000 acres should be protected. 9

D. The Marble Canyon ACEC should be 15,000 acres, as suggested in Alternative #3, to adequately protect threatened and endangered species. 10

E. Vermillion Cliffs Natural Area should remain designated as such.

F. Severe grazing problems are evident at the mouth of Paria Canyon and in the Vermillion Cliffs Natural Area. These grazing problems need to be addressed, and grazing plans should be adjusted downward to reflect the impact of the drought Arizona has experienced over the past two years. 11

G. Andrus Canyon should be designated as an ACEC, in spite of your conclusion in the draft RMP. Again, the BLM Manual 1613.22 A-4 states that public lands adjacent to designations of other government agencies must be reviewed to determine if the special values extend into the planning area. Andrus Canyon is near Lake Mead National Recreation 12

04-12 (continued)

7. See general response to public comments page V-6.

   The absence or presence and significance of archaeological resources in Kanab Creek has not been substantiated by BLM. We totally agree that a class II inventory is needed.

   The majority of historical and superior peregrine falcon habitat is included in wilderness, Grand Canyon National Park or covered by OHV designation. Kanab Creek north of Gunsite Point is marginal or acceptable peregrine habitat.

8. Highway 89A through House Rock Valley will be managed according to VRM class II guidelines. Most of the other land along highway 89A is private or Indian reservation where the bureau has no jurisdiction. Where feasible powerlines would be buried.

9. See general response to public comments page V-7.

10. See general response to public comments page V-6.

11. Grazing occurs along the Paria River for three months during the winter for two years and no grazing on a third year. Grazing then occurs six months out of 36 months. There are 30 months of rest from grazing. Cattle being what they are, will concentrate in shaded tree areas and graze those areas heavily. But our studies show dramatic improvement of the cottonwoods and willows in the riparian areas along the river.

    The other grazing problem along the Vermillion Cliffs occurs on the west side of House Rock Valley in the House Rock allotment. This allotment developed heavy to severe utilization problems in the west-most pasture from grasshoppers, livestock and drought. Currently, livestock numbers are about one eighth of normal (1990) and a new management plan is being worked out.

12. See general response to public comments page V-7.

04-12 (continued)

Page Ref.

Area, and the beauty and remoteness of the area is important to maintaining the integrity of the scenery in Lake Mead N.R.A.

H. All ACEC areas should be closed to mineral exploration and entry.

V. The mining claims on the Arizona Strip are so numerous that they deserve special consideration and more than perfunctory operating and reclamation requirements:

S-9 A. Given the extent of mining claims in the area, why not require the most restrictive guidelines on more than 895,000 ac, in Alternative #3? | 13

B. How does the BLM plan to manage microscopic gold mining, if it should occur? There is no evidence in the Draft RMP of planning for this possibility, and this would be an extremely disruptive operation, environmentally. Different plans of operation and reclamation requirements will have to be developed if it occurs. | 14

C. On whatever Alternative is picked, ACEC areas should include strictest possible plan of operations for mining on existing mining claims.

D. Serious concern remains regarding the cumulative effects of the mines, since they are not evenly spaced over the entire Arizona Strip; they're concentrated in the area unfortunately close to the Grand Canyon and the Kanab wilderness. This should be taken into account in the RMP. | 15

E. The worst-case scenario should be addressed in the final RMP since mining companies may become less conscientious once the RMP process is completed. | 16

VI. Our concerns over roads are:

I-2 A. There are 5,262 mi. of unpaved roads. It is not easy to control access once a new mining road is developed, therefore, less roads should be opened.

B. How does the BLM plan to enforce its road plans, once areas are designated? | 17

III-23 C. "Few roads extend to the southern tier" - this is not true - see map III-23. | 18

D. No areas should be designated as ORV areas except the two small acreages mentioned, near two communi-

13. The analysis presented in the draft RMP/EIS addresses both the past and reasonably foreseeable future impacts from mining in the district. The analysis shows that mineral exploration and development can be managed, under current regulations with the management prescriptions identified in the preferred alternative, in a manner that acknowledges and protects other resource values. For this reason, the most management prescriptions outlined under Alternative 3 were not included in the proposed RMP.

14. The exploration for and development of minerals other than uranium was addressed in the RMP/EIS page III-4. The development of gold deposits in the district would be managed in accordance with the 43 CFR 3809 regulations and decisions made in the resource management plan. Should proposals for the exploration or development of gold be received, they would be reviewed and reclamation measures identified at that time.

15. The consideration that deposits of uranium in breccia pipes do not occur uniformly throughout the district was taken into consideration in the draft RMP/EIS. On page A-82 of the draft RMP/EIS, it is stated that the development of uranium resources is expected to occur in areas of high uranium resource potential and no extensive overburden of volcanic or sedimentary rock which would significantly complicate exploration. Site-specific EAs prepared in response to mine plan submissions have addressed impacts associated with individual mines. None of the analyses have identified any significant impacts to either wilderness or park lands from proposals thus far submitted. Furthermore, no impacts were identified to adjacent land owners in this document. See new subsection in Chapter IV called "Impacts to Adjoining Lands."

16. See comment response 04-30-03.

17. Road closures would be enforced by signing, public education, physical barriers and ranger patrols.

18. This statement has been removed from the document.

04-12 (continued)

Page Ref.

ties on the Arizona Strip.

S-14 E. The impact of additional roads required for intensively managed fuel wood areas is not adequately considered. | 19

S-19 F. Increased roads mean reduced remoteness - this should be considered in regards to mining operations, in terms of maintaining the integrity of Grand Canyon National Park. | 20

S-23 G. Alternative #3 could better manage for remoteness.

VII. Concerns Over Riparian Areas:

A. Any riparian area should be protected through special management, as rare as these areas are in Arizona.

B. The Beaver Dam/Virgin River area riparian area is accorded protection by Alternative #3 and not by #2. It should be protected in all alternatives. | 21

VIII. Suggestions pertaining to threatened and endangered or sensitive species:

A. ACEC boundaries and management of ACEC's may need to be altered as more information on nesting pairs of Peregrine Falcons is gathered.

B. Predator species should be protected in order to keep the natural balance of animals (such as rodents) and plants, particularly in ACEC areas.

C. Sensitive plants in riparian areas which are listed in the Arizona Natural Heritage list, and also all category two plants should be given as much protection as possible, to keep their populations from declining.

D. Any proposed surface disturbance should be reviewed by a plant specialist who has visited the area, in order to check for the existence of endangered species.

E. In order to adequately protect sensitive plants in riparian areas, threatened or endangered species and sensitive plants in riparian areas, the following practices should be incorporated into the chosen management plan: (1) vegetative manipulation should be prohibited; (2) ACEC's should be closed to mineral exploration; and (3) no surface disturbance should be allowed on fluid mineral leases.

04-12 (continued)

19. No new permanent roads would be constructed for woodland harvest. Some temporary access would be required, but when the access was no longer needed the disturbed areas would be reseeded. The impacts from woodland harvest roads are described on page IV-26 in the draft RMP/EIS.

20. The impacts of mining with its associated roads is analyzed in a new subsection added to Chapter IV. See page IV-30 of the final RMP/EIS.

21. The Virgin River/Beaver Dam confluence riparian area has been included in the proposed plan as an ACEC, see page II-18.

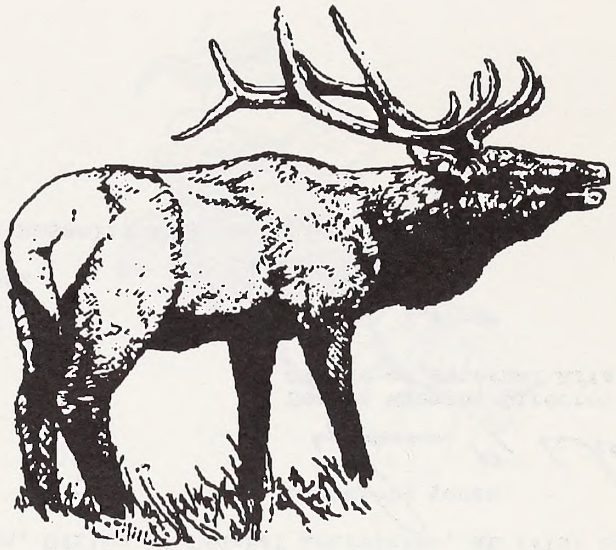
F. Great care should be taken by the BLM to assure that areas containing T. and E. species of animals or plants are closed to O.H.V.'s including ripping and re-vegetating existing roads and trails. The Arizona Strip is large and O.H.V.'s are nearly impossible to restrict to designated roads and trails.

Representing Audubon members throughout the State of Arizona, we urge you to seriously consider the above comments in your final management plan for the Arizona Strip.

Jon J. Harris, PRES.
PRESCOTT AUDUBON SOC.

Janine A. Spencer
Conservation Chair
Prescott Audubon Society

Don Rawlings
Conservation Committee
Prescott Audubon



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, CA 94105

10 APR 1990

Mr. G. William Lamb
District Manager
Arizona Strip District
Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

Dear Mr. Lamb:

The Environmental Protection Agency (EPA) has reviewed the proposed ARIZONA STRIP DISTRICT DRAFT RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT (DEIS). Our comments on this DEIS are provided pursuant to the National Environmental Policy Act (NEPA) and EPA's authorities under section 309 of the Clean Air Act.

The ARIZONA STRIP DISTRICT DRAFT RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT identifies and analyzes alternatives for managing the resources on 2.8 million acres of public lands in northwestern Arizona, which are administered by the Bureau of Land Management (BLM).

We have classified this DEIS as Category EC-2 (see enclosed "Summary of Rating Definitions and Follow-Up Action"). Our rating reflects concerns we have regarding the existing watershed conditions and surface water quality in the Arizona Strip District. We support the proposed Wild and Scenic Rivers classifications for the Virgin and Paria rivers and recommend that the Preferred Alternative include designation of the 120-acre Beaver Dam/Virgin River confluence riparian demonstration area. EPA also supports the closing of sensitive areas to off-highway vehicles and recommends that these areas include riparian area watersheds and areas of high erosion potential. We believe that these designations will enhance the protection of the aquatic ecosystems within the district.

We appreciate the opportunity to review this DEIS. Please send three copies of the Final Environmental Impact Statement (FEIS) to this office at the same time it is officially filed

with our Washington, D.C., office. If you have any questions, please contact me at (415) 556-6387, or have your staff contact Jeanne Dunn, Office of Federal Activities, at (415) 556-5104.

Sincerely yours,

Deanna Wieman, Director
Office of External Affairs

Enclosures

dcn: 90-082

cc: Carol Russell, ADEQ

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

10 APR 1990

LO—Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1—Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."



04-13 (continued)

1 0 APR 1990

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

Riparian Resources

1. In accordance with BLM's 1987 Riparian Area Management Policy, this DEIS addresses riparian areas and proposes specific management prescriptions for priority riparian areas. EPA fully supports the designation of the Virgin River Corridor as an Area of Critical Environmental Concern (ACEC) and urges BLM to adopt a management plan that will effectively maintain and restore the significant wetland and riparian resource values along this portion of the Virgin River. We recommend that the entire Virgin River ACEC be closed to off-highway vehicle (OHV) activities.

2. According to Table III-14, the riparian area along the Virgin River is in fair condition. It is unclear whether this condition is due primarily to the January, 1989, flood or to the grazing systems currently in use. A discussion is needed of the effectiveness of the deferred grazing systems in restoring the riparian communities along the Virgin River. | 1

3. The designation and intensive management of 120 acres at the Beaver Dam/Virgin River confluence as a riparian demonstration area would enhance BLM's ability to maintain this riparian community, which is currently in good condition (Table III-14) and, therefore, functions as a valuable reference area for future riparian restoration efforts elsewhere in the district. The resources, objectives, and management strategies of the riparian demonstration area should be specified. | 2

4. EPA supports the proposed Wild and Scenic Rivers classifications for the Virgin River and Paria River (Table II-1). Inclusion in the Wild and Scenic Rivers System will ensure that the free-flowing characteristics of these river segments are maintained and, consequently, will significantly enhance the protection of the aquatic ecosystem.

Water Quality

1. According to the DEIS (page III-14), 1,188,000 acres comprising over 36% of the district are Category IV areas, in unsatisfactory condition with moderate to severe erosion problems. Livestock grazing in these areas presumably results in non-point source discharges of coliform bacteria, nitrate, and sediments. In highly eroded saline watersheds, discharges of total dissolved solids (salinity) into tributaries of the Colorado River are a major concern. Erosion also affects the physical and biological integrity of waters. The stated objective for Category IV areas is to improve vegetative ground cover through grazing management

04-13 (continued)

1. The fair condition rating of the Virgin River riparian area as shown in Table III-14 is based on the results of a one-time macro-invertebrate sample as explained in the footnote. Neither the January 1989 flood nor current grazing systems were considered in the rating.

   Of the 29 miles of Virgin River riparian ACEC, approximately two-thirds is subject to seasonal livestock grazing. The other one-third is ungrazed. There are no deferred systems in effect. Seasonal livestock grazing can be used as an effective method to accommodate growth requirements of riparian vegetation. Among the beneficial options available through seasonal grazing are, removal of livestock prior to leaf growth on cottonwood saplings; avoiding use during the hot season when cattle tend to congregate in riparian zones, and grazing during vegetative dormancy. Table II-1 and Table II-2 outline guidance for intensified management of riparian communities.

2. Riparian resources, objectives and management strategies beyond those identified in Table II-1 and Table II-2 will be developed in the specific demonstration area management plan. Data gathering is underway for developing the plan which will be combined with a hydrologic study of the same area. A Memorandum of Understanding is being finalized with the Soil Conservation Service Plant Materials Center in Tucson to test and propagate adapted cottonwoods for planting in Arizona Strip riparian Zones. Initial testing will be done in the demonstration area over the next couple of years.

3. Individual watershed activity plans are not ordinarily included or addressed in an RMP. These plans are approved subject to the completion of EAs. The watershed activity plans have been addressed in the MSA. However, we have provided the following details.

   Under two existing and the six proposed watershed activity plans in the Preferred Alternative, about 459,000 acres are category IV watershed areas. Brief descriptions of the watershed plans are as follows:

   a. Fort Pierce Community Watershed Plan - Developed in 1963 to reduce excessive erosion and runoff from and to increase desirable vegetation on soils within about 970,000 acres most of which are in the Vermillion Resource Area. Additional goals were to reduce sedimentation and flooding on farmlands along the Virgin River Valley. The watershed lies within Townships 35 to 42 North and Ranges 5 to 13 West, G&SR Meridian. All projects were completed in the 1960s during times of substantial program funding.

   b. Upper Langs Run Watershed Plan - Developed in 1986 to reduce excessive erosion and runoff from and to increase desirable vegetation on soils within about 25,500 acres west of Mt. Trumbull. The watershed lies within

or land treatments (Table II-1). The Final Environmental Impact Statement (FEIS) needs to indicate how many of the Category IV acres are covered under the two existing and six proposed watershed activity plans identified in the Preferred Alternative, identify the grazing allotments affected, and include a brief description of the activity plans. The FEIS also needs to summarize the means by which the implemented grazing Activity Management Plans (AMPs) are addressing erosion problems in the Category IV areas not covered under specific watershed activity plans. 3

2. In 1988, Arizona Department of Environmental Quality (ADEQ) prepared a Water Quality Assessment and a Non-Point Source Assessment Report (SAR), the latter of which was approved by EPA on August 28, 1989. The SAR provides the following information, which should be cited in the Water Quality section of Chapter III of the FEIS: 4

- Over 90 percent of Arizona's waters are not meeting designated beneficial uses required by state water quality standards due to impacts from non-point sources.

- The most significant categories of non-point sources impacting Arizona's waters, by stream miles, are grazing, hydrologic/habitat modification, recreation and resource extraction.

3. As stated on page III-16, ADEQ has been designated as the lead agency for implementation of the Section 319 Non-Point Source Program. ADEQ has prepared, and EPA approved on January 4, 1990, a State Non-Point Source Management Program (SMP), which identifies federal programs and activities that will be subject to the Federal Consistency review requirements of sections 319(b)(2)(F) and 319(K) of the Clean Water Act. These sections require federal agencies to submit specific assistance programs and development projects to the lead state non-point source agency (ADEQ) for review for consistency with Arizona's SMP. Specific BLM programs identified in the SMP include: watershed projects; mineral exploration and development; coal, oil and gas leasing; OHV activities; timber activities; grazing allotment/grazing management chemicals and pesticides; area analysis/cumulative impacts; riparian management plans; and ACEC plans. Furthermore, it is BLM's responsibility to implement sufficient Best Management Practices (BMPs) to enable full protection of beneficial uses of surface waters, attainment of surface water quality standards, and compliance with the anti-degradation 5

Townships 34 and 34 North and Ranges 8 and 9 West, G&SR Meridian. All projects are on-going and will be completed when funding permits.

c. Fort Pierce Wash Watershed Plan - Programmed to start writing in 1990 to reduce excessive erosion and runoff from an area of about 30,000 to 39,000 acres, most of which are saline soils. Other goals are to protect endangered Pediocactus sileri habitat and prevent disturbance of fragile saline soils which are stabilized by a unique cryptogam community in and around the proposed Fort Pierce ACEC. The watershed lies within Townships 40 to 42 North and Ranges 9 to 11 West, G&SR Meridian. The area is primarily from atop the Hurricane Cliffs to Dutchman Draw.

d. Wolf Hole Valley Watershed Plan - Main purpose is to reduce erosion and runoff from and to increase desirable vegetation on soils within about 25,000 acres to the south of Wolf Hole Mountain. Other goals include stopping active head cutting and stabilizing gullies. The watershed lies within Townships 38 and 39 North and Ranges 12 and 13 West, G&SR Meridian.

e. Johnson Run Watershed Plan - Main purpose is to reduce erosion and runoff from and to increase desirable vegetation on soils within about 163,000 acres. This includes stabilization of saline soils to the east of Fredonia. The watershed lies within Townships 39 to 42 North and Ranges 2 to 3 East, G&SR Meridian. The watershed is from about Fredonia east to Buckskin Mountain and from the Utah border south to the Kaibab National Forest and Ryan Road.

f. Hobble Canyon Watershed Plan - The main goals are to reduce runoff from the surrounding watershed into Hobble Canyon, protect the Hobble Canyon Road from headcuts, and reduce overall erosion within about 26,000 acres. Other goals are to increase desirable vegetation where possible, stop head cuts and stabilize gullies. The watershed lies within Townships 36 to 38 North and Ranges 12 and 13 West, G&SR Meridian. It is located in the area surrounding Hobble Canyon, south of Mustang Knoll.

g. Lower Hurricane Valley Watershed Plan - Purpose is to reduce erosion and runoff from and develop management strategies for soils within about 120,000 acres, of which much are saline soils. The watershed lies within Townships 36 to 41 North and Ranges 9 to 11 West. It lies between Main Street Valley east to atop the Hurricane Cliffs and from Black Rock Canyon south to Diamond Butte.

h. Upper Bull Rush Wash Watershed Plan - The goal is to reduce erosion and runoff from soils within an area of about 59,000 acres, much of which are saline soils. Other goals include stopping head cutting and stabilizing gullies. The watershed lies within Townships 37 to 39 North and Ranges 5

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

10 APR 1990

provisions of 40 CFR 131.12. We strongly encourage BLM to work closely with ADEQ to satisfy the Bureau's obligations under the Federal Consistency requirements of section 319 and 40 CFR 131.12. EPA expects that BLM's development of a Memorandum of Understanding with ADEQ will serve to facilitate this process, and we encourage BLM to establish this as a priority. We would like to take this opportunity, however, to recognize BLM's active involvement in ADEQ's Grazing BMP development committee. 5

4. The DEIS mentions on page III-15 that BLM's management objective for water quality is to ensure that all waters on public land meet or exceed federal and state water quality standards. The FEIS should briefly state how this objective will be met and include a list of the water quality testing sites, frequency of sampling, and the parameters to be monitored. We recommend that, at a minimum, the sites be sampled annually and that parameters to be monitored in surface waters include nutrients and all of the chemical parameters for which Arizona has water quality standards. BLM should consult with ADEQ in the design of the monitoring program. BLM should also carry out bioassessments in surface waters that are potentially impacted by non-point sources, since these methods are particularly valuable in detecting effects of non-point sources of pollution, including sediment loadings. BLM should enter such biological data into the BIOS database (part of EPA's STORET system). 6

5. Appendix 7 lists the public lands identified for disposal by sale or exchange. EPA is concerned that some of the parcels such as those near Littlefield and Colorado City may include waters of the United States (e.g., Beaver Dam Wash, Virgin River, Short Creek). Because the public lands identified for disposal generally have potential for economic development, it may be assumed any waters of the United States within these parcels will eventually be impacted by residential, commercial, or recreational development. The FEIS needs to identify which parcels, if any, include waters of the United States, particularly major drainages such as Beaver Dam Wash and the Virgin River. 7

6. The Fort Pierce ACEC is a critical watershed and home to endangered species, but under the Preferred Alternative, it would not be subject to No Suface Occupancy (NSO) or livestock management. It is not clear why, under this alternative, all of the ACECs with critical watersheds and/or endangered species do not call for NSO and livestock management. Furthermore, EPA recommends that BLM designate the entire 3600-acre parcel as an ACEC in order to better protect the critical watershed. 8

and 6 West, G&SR Meridian. It is the area from Yellowstone Mesa south to Hack Canyon.

Grazing Allotments Significantly Affected by Watershed Plans:

a. Fort Pierce Community Watershed Plan

Since projects were completed over 20 years ago, before the Grazing EIS, this plan will have little effect now.

b. Upper Langs Run Watershed Plan

1. Crosby Tank
2. Mt. Trumbull
3. Mt. Logan
4. Tuweep

c. Fort Pierce Wash Watershed Plan

1. Blake Pond
2. Rock Canyon
3. Antelope Spring
4. Lower Hurriicane

d. Wolf Hole Valley Watershed Plan

1. Wolfhole Lake
2. Wolfhole Canyon
3. Whiterock-Soapstone

e. Johnson Run Watershed Plan

1. Franks Reservoir
2. Fuller Road
3. Chatterly
4. Muggins Flat
5. Highway
6. Button
7. Johnson Spring
8. Rider
9. 8-Mile Pass
10. Pratt Pasture
11. Johnson Run
12. Shuttleworth
13. Spooks Knoll
14. Jacob Canyon
15. White Sage

f. Hobble Canyon Watershed Plan

1. Hidden
2. Jump Canyon
3. Sullivan Tank

g. Lower Hurricane Valley Watershed Plan

1. Lower Hurricane
2. Wolf Hole Canyon
3. Wolf Hole Mountain
4. Blake Pond
5. Jackson Tank
6. Toquer Tank
7. Clay Spring

10 APR 1990

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

7. In light of the significant impacts to water quality from grazing, we suggest the following measures be identified and evaluated for implementation in the FEIS:

- Include special provisions in grazing allotment plans to reduce the number of animal units in allotments during drought conditions.

- Use fencing or other methods to exclude livestock from all riparian areas (including those ineligible for ACEC status such as Grand Wash, Red Rock, and Middle Spring), since livestock in riparian areas have a significant negative impact on water quality due to trampling of stream banks and consumption of riparian vegetation. 9

8. EPA strongly supports the closing of sensitive areas to OHV activities. The limitation on the use of OHVs to existing or designated roads on most of the remaining portions of BLM land would have beneficial impacts on water quality, since the use of OHVs, especially in riparian areas, can be a significant non-point source of pollution. However, we have serious concerns as to whether such a restriction could be enforced, given the extensive area that BLM manages. A better alternative, in terms of non-point source control, would be to close all riparian area watersheds and areas of high erosion potential to OHVs. 10

9. The FEIS should evaluate the area that, under the Preferred Alternative, would be open to OHV activities. The area's current resources and the impacts of OHVs to air and water quality, soil erosion, wildlife, and vegetation should all be discussed. 11

10. The FEIS should contain the procedures for resolving conflicts between resource development activities and protection of surface water quality. Alternatively, such procedures could be included in a Memorandum of Understanding with ADEQ. Resolution of conflicts should ensure that beneficial uses of surface waters will be fully protected, that surface water quality standards will be attained, and that there is no further degradation of surface water quality. 12

Withdrawal Revocations

1. It is not clear why, under alternatives 2 and 3 (the preferred and more protective alternatives, respectively), the Boulder Canyon and Turbinella-Hybrid Oak withdrawals would be

V-99

h. Upper Bulrush Wash Watershed Plan

1. Clayhole
2. Lamb Tank
3. Hack Canyon
4. Moonshine
5. Valley Wash

Other Category IV Areas:

Allotment management plans (AMPs) have been developed for most of the allotments in category IV not covered in the existing or proposed watershed plans. The object is to control grazing so that plant cover, primarily grasses, increases significantly. Trend is monitored yearly in order to assess the effectiveness of the grazing system. AMPs will be revised if unsuccessful.

Additional Concerns:

The condition of riparian areas around all springs needs to be evaluated and plans for their protection and enhancement incorporated into all activity plans.

Proposed watershed plan boundaries are tentative estimates until initial ground truthing can be done. Accomplishment of these plans depends upon funding and personnel commitments.

Current erosion condition and salinity contributions will be calculated on new watershed plans using the presently accepted methods of analysis. Then the affected allotments will be recategorized down to a more detailed pasture level according to the new information.

4. Non-Point Source Assessment Report has been added to the Water Quality Section of Chapter III (p. III-14).

5. The Arizona BLM State Office is responsible to develop a Memorandum of Understanding (MOU) with ADEQ. Once this is completed we will have our guidelines and authority to coordinate activities through Best Management Practices with ADEQ.

6. The referenced sentence on page III-15 should read "BLM management objective for water quality is to ensure that all waters on public lands meet our exceed federal and state water quality standards **FOR SPECIFIC USES**." This is in conformance with Description of Alternatives, Water Resources 3. Water Quality on page III-16 of the draft RMP/EIS.

Currently, the Virgin River is being monitored randomly as part of an instream flow study. Parameters include nutrients and coliform bacteria. BLM needs to coordinate with ADEQ to possibly expand the monitoring parameters. The STORET system will be used for date storage in the near future.

04-13 (continued)

revoked. The only positive effects of this designation appear to be on the mineral industry, but there is no mention of impacts to vegetation, wildlife, riparian communities, special status species, or watersheds. In fact there is no discussion at all of these two areas and why they were designated withdrawals in the first place. 13

2. It is also unclear why the portion of the Vermillion Cliffs Natural Area withdrawal outside the Paria Plateau Special Recreation Management Area (SRMA) would be revoked under Alternative 3. The DEIS gives no other discussion of this, and revocation does not appear to be consistent with the More Protective alternative. 14

3. In its various discussions about communication sites, the DEIS mentions Black Rock Mountain, Seegmiller Mountain, and Moccasin Mountain but provides no other information about these sites (e.g., their resources, whether or not they currently are designated as communication sites, what impacts these designations have on these areas or would have under the various alternatives). 15

Special Designations

1. The FEIS should provide specific comparisons between the various alternative designations (e.g., Resource Conservation Area, SRMA, ACECs) for the Paria, Parashant, and Mt. Trumbull areas. As the DEIS is written, it is difficult for the reader to determine exactly what protection trade-offs are inherent in each alternative. Indirect, or secondary, impacts of these alternatives should also be addressed. How will positive impacts to wildlife, riparian habitats, and water quality be ensured under the different scenarios? 16

2. The analysis of Impacts to Wilderness on page IV-50 does not address impacts from special designations, visual resource management, or watershed areas outside of the wilderness areas (e.g., from woodlands and forestry, livestock, and mineral development). 17

Forest/Woodland Resources

1. It appears that the woodland harvest areas in alternatives 2, 3, and 4 are predominantly in Category IV watersheds. All woodland harvest plans should detail the management strategies to be followed to ensure that harvest practices will not further degrade the watersheds and be consistent with watershed improvement plans. 18

04-13 (continued)

7. It is bureau policy to acquire riparian areas, not dispose of them (Draft RMP/EIS II-20). Refer to the detailed list of lands proposed for possible acquisition or disposal in Appendices 7 and 8.

8. Appendix 10, Category C outlines the rationale for leasing oil and gas under the no surface occupancy (NSO) stipulation to protect important scenic values in the preferred alternative. Alternative 3 proposed NSO on other areas such as ACECs to provide a range of alternatives for impact analysis. Site-specific impacts and stipulations would be addressed in an EA upon filing of an application for permit to drill.

   All rangelands on the Arizona Strip that are allotted for livestock grazing are subject to management. Table II-1 (page II-24 of the draft RMP) outlines the present grazing management program. This program was analyzed in grazing environmental impact statements and implemented. The program is dynamic and is subject to change through rangeland monitoring studies, analysis, and evaluation.

   The primary reason for designating the Fort Pierce ACEC was for the endangered Siler pincushion cactus. The natural occurrence of saline soils is widespread on the Arizona Strip District as noted on Map III-11 of the RMP and by itself would not meet the relevance and importance criteria as outlined in 43 CFR 1610.7-2. Increase in size of the Fort Pierce ACEC would place unnecessary restrictions on other multiple use considerations in the buffer area and result in redundancy of protection measures.

9. The need for special provisions in the RMP for drought are not necessary. The grazing regulation (43 CFR Part 4100) provides the regulatory tool for this. The utilization studies of forage trigger the removal of livestock. During the drought of 1988 to present, some allotments have been totally destocked. Most of the allotments have reduced livestock numbers significantly.

   All our significant riparian spring areas on the Arizona Strip District (such as Red Rock, Middle Spring) are fenced and protected. See Table III-14 in the draft RMP/EIS for status of riparian areas. The riverine systems are not protected by special fences because of topography, cost, split land ownership, wildlife, etc. Instead, rest-rotation grazing systems are used.

10. The preferred alternative relating to OHV management is a manageable objective. There might need to be increased funding to provide for additional personnel for monitoring and law enforcement, but the designations can be enforced. Also, management attention would focus around sensitive or recognized problem areas such as riparian or potentially high erosion areas.

04-13 (continued)

10 APR 1990

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

Pesticide and Herbicide Use

1. Any pesticide use should be discussed with respect to its effect on fish and wildlife, particularly endangered species, and on water quality. Appropriate precautions should be included in the discussion.

2. If pesticide or herbicide use is proposed, the FEIS should indicate that the compound:
- Is registered with EPA
- Is registered for the specifically proposed use
- Would be marked with a current label
- Would be applied by a certified applicator or by personnel under the direct supervision of a certified applicator
- Would be used in accordance with all state and federal laws
- Would be applied in such a way that precautions are taken to protect workers during the operation

3. The FEIS should discuss the use of pesticides or herbicides in relation to the following topics: 19
- Cattle-dip treatment
- Fire prevention programs
- Predator control programs
- Deer repellent programs
- Wood preservative treatment for fences
- Vegetation control near roads and right-of-way corridors
- Control of disease vectors such as fleas

4. The FEIS should address the following considerations for the safe use of pesticides or herbicides in the project area:
- Provisions for mixing, stroing, loading and disposal of pesticides or herbicides
- Spill prevention contingency plans
- Adverse effects on non-target species
- Applicator safety and prespraying notification procedures
- Impacts on aquatic resources
- Current status of the pesticide or herbicide to be used
- Alternative means of achieving desired management goals

Mineral Development

1. Appendix 5 of the DEIS presents stipulations for reclamation after mineral development, but the document does not provide stipulations for environmental protection during constuction or excavation and development. The FEIS should include a brief summary of the requirements for these activities. 20

V-101

11. A site-specific plan for operation and management of any designated open areas would have to be developed before any authorization for OHV activity to occur in any open area. This plan would have to meet NEPA requirements for analyzing impacts to vegetation wildlife, soil erosion potentials and other pertinent resource values.

12. All resource development activities are regulated under the NEPA process by EAs. ADEQ is consulted on all EAs involving watershed issues. The EAs also are public documents. EAs are reviewed by watershed specialists to insure that surface water concerns are met. Monitoring the effects during and after the activities is done.

13. Review of all withdrawals is required by the Federal Land Policy and Management Act (FLPMA) to determine if they are still needed or used for the purpose for which they were withdrawn. A determination was made to return the withdrawn land to un-withdrawn status because the need for the withdrawal has passed. Impacts to all resources are thoroughly examined before the proposal was made.

14. The withdrawal revocation was included in Alternative 3 in order to analyze a range of alternatives.

15. Communication sites (rights-of-ways granted under Title V of FLPMA) were identified in order to consolidate users and keep all impacts to a few mountain tops instead of scattered over the district. Impacts are minor or non-existent to surface resources. The chief impact is usually visual, although screening by vegetation, terrain, and paint is used for mitigation as far as possible. See changes in text for a complete list of communication sites (see page III-2).

16. Table S-7, Summary of Impacts by Alternative, and Table II-2, Management Prescriptions for Special Management areas were included in the draft RMP to provide specific comparisons of the alternatives. In Chapter IV (impacts section) only impacts deemed to be moderate or high were included. Each alternative has different impacts, some of which may not always be positive. BLM will consider the various impacts and select a proposed RMP which best meets the objectives.

17. Analysis of impacts was done on impacts to wilderness for the types of exterior/non-wilderness management activities mentioned in this comment. Impacts were generally positive and minimal for the wilderness resource and thus not addressed.

04-13 (continued)

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

10 APR 1990

Air Quality

1. The FEIS should discuss any potential air quality impacts from OHV activities, mining, and prescribed burning and general mitigation measures which will be employed. | 21

Right-Of-Way Corridors

1. The potential impacts of the right-of-way corridor to soil, water, vegetation, wildlife, and riparian habitats should be discussed in detail in the FEIS. Although action- and site-specific environmental assessments (EAs) will be developed when specific projects are proposed, the corridor should not be sited in its proposed location if the typical activities for which it is expected to be used will not be mitigable. In order to facilitate a decision regarding the location of the corridor, these issues must be addressed in the FEIS. | 22

Supplemental NEPA Documents

1. We request that BLM notify EPA whenever any of the referenced activity- or site-specific EAs and EISs (to be developed at later dates) are released for public review. These plans include: SRMA, RCA, or ACEC plans, Right-Of-Way proposals, woodland harvest and forestry management plans, and riparian habitat management plans and activity management plans.

Toxic Waste

1. Under the Preferred Alternative, BLM proposes to acquire up to 244,000 acres of State and private land. We understand that the site-specific environmental analyses are prepared for each acquisition. EPA recommends that the FEIS discuss how BLM will determine whether any of the proposed lands contain sites where hazardous wastes were disposed of in past years. The presence of hazardous wastes could diminish the habitat and public recreation values of the proposed acquisition. Furthermore, once the lands became BLM property, BLM would become a potentially responsible party under the terms of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Pub. L. No. 96-510 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499 (SARA). As such, BLM could be legally responsible for remedial investigations, cleanup activities, and full or partial cleanup costs. | 23

04-13 (continued)

Wilderness Management Policy for the BLM requires that no buffer zones will be created around wilderness areas to protect them from the influence of activities on adjacent land. The fact that non-wilderness activities or uses can be seen or heard from areas within the wilderness shall not of itself preclude such activities or uses up to the boundary of the wilderness area.

18. Refer to 04-13-03 for relationship to watershed activity plans. Woodland rest areas will be included in woodland management plans which are subject to environmental assessment to determine impacts on other resources (including watershed) and mitigation measures to reduce negative impacts or enhance positive impacts.

19. The BLM herbicide and pesticide programs are included in this document by reference. They come under the guide of the 1990 Rangeland Grasshopper Cooperative Management Program and EA developed in coordination with all affected parties; and the soon to be finalized Vegetation Treatment on BLM Lands in the Thirteen Western States Environmental Impact Statement. The BLM also writes case-by-case EAs for specific pest management efforts.

20. Appendix 5 of the draft RMP/EIS has been changed to reflect this comment.

21. Refer to response to 03-01-03, Air Quality Impacts From Transportation, for road use.

Off-road use would be difficult to estimate since there is no way to get an accurate vehicular count except on organized events such as motorcycle races. Potential fugitive dust can be assessed from such events occurring on specific courses using the ISC dispersion equation. Since fugitive dust is not regulated under state or federal standards, mitigation would be driven by visual and/or erosion prevention concerns. General mitigation could include restricting most regions from OHV use and limiting uses to existing roads or on gravelly or stony surfaced soils with raking and seeding required where deemed needed.

Combustion emissions are considered as immeasurable and insignificant.

The impacts of particulate from prescribed burns are primarily visual. Mitigation to reduce visual impacts and insure compliance with EPA and state standards includes the following:

A. All prescribed burns follow a prescription which:

1. Insures the cleanest burns at optimum air temperatures, fuel moisture, etc.

ARIZONA STRIP DISTRICT
DRAFT RMP/EIS APRIL 1990

1 0 APR 1990

Maps

1. Despite the great number of useful maps in the DEIS, one comprehensive "road map" that synthesizes several topics would have been extremely helpful during review. A map of this sort should include the following with their names: rivers and streams; current wilderness areas and national parks and forests; major roads and cities; and referenced mountains, communication sites, and withdrawal areas. 24

2. Map II-23 does not indicate what segments of the Paria River would be wild or scenic. 25

3. On Map II-16, does the unmarked area really represent Category 2? If so, why does the eastern edge of the desert tortoise habitat stop abruptly at the eastern edge of the map? 26

2. Allows burning when winds are best for smoke dispersal and avoidance of class I and other sensitive areas.

3. Minimize residual smoke and human exposure.

4. Coordinates burning locations to maximize efficiency.

5. Has a contingency plan to deal with "escaped" fires.

B. Burn plans are coordinated with all concerned state and federal agencies and concerned parties.

C. In the future, smoke dispersion modeling will be done as part of the prescription planning.

D. Smoke monitoring instruments may be used to gather baseline information on actual pollutant concentrations.

E. Fires will be suppressed if they exceed prescription limitations.

22. The proposed corridors were analyzed by an interdisciplinary team; only high or medium impacts were discussed in the document. The right-of-way corridors are designed to keep impacts of rights-of-way all in one area. Prior to granting any right-of-way, impacts to all resources are analyzed with a NEPA assessment, and mitigating measures are added as special stipulations to the right-of-way grant.

23. Secretarial Order No. 2137 states that it is Department of Interior policy to determine whether hazardous substances are present on real estate before such real estate is acquired for the United States. A contaminant survey checklist is completed on all proposed real estate transactions prior to acquisition.

24. A new location map has been prepared. It has township and range lines on it and other geographic locations.

25. The entire segment of the Paria River under study meets the wild criteria. The map (II-17) has been changed to reflect this.

26. The area with horizontal lines spaced 1/8 inch apart show category 2 tortoise habitat. The map has been changed to clarify this.

Grand Canyon Sunset
Grand Canyon National Park, Arizona

A short break in the clouds of a storm at sunset achieves a brilliant contrast of color and light in the darkness at the deep canyon floor.

PHOENIX, AZ 850 PM 89 1990



Photograph by © Paul Corkum Paul Corkum

Paul Corkum is a New England photographer who desires to share with others those images that capture his feelings for the people, places, and natural beauty around him. His published images include nature, historical subjects, cityscapes, and events involving people and joyous children.

Small Prints to Send, Give, Frame or Hang As Is.

Dear. Mr. Curtis- Your EIS for the Arizona Strip District is very good. I encourage you to adopt Alternative 3. While 2 is good - 3 is better. 1 & 4 are both bad choices. 3 should be adopted because the land can only be pristine once. Once it is lost, it is lost for good. The Arizona Strip is a unique area & should be protected & preserved at all costs. It shouldn't be developed for any type of economic gain. It shouldn't be allowed to go the way of so much of the United States. Please save this beautiful area for future generations.

Mr. Dennis Curtis
Team Leader
Arizona Strip District
390 N. 3050 E.
St. George, UT
84770

Sincerely,
Bob Woodward
3730 Roberts #509
Flagstaff, Az 86001

Produced by **Beautyway**, Box 340, Flagstaff, AZ 86002
Cooperative Publisher with Museums, Parks, and Travel Organizations. Printed in Hong Kong 913

Dennis Curtis
BLM
390 North 3050 East
St George, Utah 84770

Dear Dennis,

We, the undersigned, oppose the airport at Ferry Swale, west of Page, AZ, for the following reasons:

1. The airport is too close to the Wilderness Area.

2. The jets will cause too much noise pollution over Glen Canyon, Marble Canyon, and Paria Canyon.

3. There are too many other, better alternative sites (i.e. to the south or east of Page) that do not adversely impact the Paria Wilderness, Glen Canyon NRA, or Grand Canyon National Park.

	NAME	ADDRESS	DATE
✓	THOMAS WORKMAN	P.O. Box 42 Marble Canyon, AZ 86036	4/10/90
	JERRY L. JOHNSON	820 W. ASPEN FLAGSTAFF, AZ	4/4/90
	Robin Johnson	820 W. Aspen Flagstaff AZ	4/11/90
	Sue Cadway	114 E. Terrace Flagstaff AZ	4/11/90
	Drifter Smith	116 E Terrace Flag. AZ 86001	4-11-90
	Cindy Burns	Box 475 Denali N.P. Alaska 99755	4-11-90
	Jack Lowery	Box 475 Denali Pk. AK 99755	4-11-90

Dennis Curtis
BLM
390 North 3050 East
St George, Utah 84770

Dear Dennis,

We, the undersigned, oppose the airport at Ferry Swale, west of Page, AZ, for the following reasons:

1. The airport is too close to the Wilderness Area.

2. The jets will cause too much noise pollution over Glen Canyon, Marble Canyon, and Paria Canyon.

3. There are too many other, better alternative sites (i.e. to the south or east of Page) that do not adversely impact the Paria Wilderness, Glen Canyon NRA, or Grand Canyon National Park.

	NAME	ADDRESS	DATE
✓	JOSEPH E. FREDRICKSON	Box HC 67-30 Marble Canyon Az Hwy 89A	4/9/90
	ROGER DENNICK	Box HC67-30 Marble Canyon AZ.	4/3/90
	Natalie Fredrickson	Box HC 67-30 Marble Canyon, AZ.	4/3/90
	Scott Fisher	Box HC-67-30 marble Canyon, Az	4/6/90
	Christine Hebbert	Box 446 Fredonia AZ	4/8/90
	Maudell Hebbert	Box 446 Fredonia AZ	4/8/90
	Constance Gleason	HC 67-30 Marble CYN AZ	

04-17

Dennis Curtis
BLM
390 North 3050 East
St George, Utah 84770

Dear Dennis,

We, the undersigned, oppose the airport at Ferry Swale, west of Page, AZ, for the following reasons:

1. The airport is too close to the Wilderness Area.
2. The jets will cause too much noise pollution over Glen Canyon, Marble Canyon, and Paria Canyon.
3. There are too many other, better alternative sites (i.e. to the south or east of Page) that do not adversely impact the Paria Wilderness, Glen Canyon NRA, or Grand Canyon National Park.

NAME	ADDRESS	DATE
Michael Gillette	Marble Canyon AZ	April 2, 1990
Roe Bo Ong	" " "	"
Maxeen Jones (Maxeen Tiosino)	Box 69 Marble Canyon Az	April 2, 1990
David Jones (DAVID L. JONES)	1571 Lexington Pueblo Co 81	4/9, 1990
Deborah J. Veeder (Deborah J. Veeder)	1531 Lexington Rd. Pueblo Co	81001 4/9/90
Mary Full (JOE Full)	2927 N. OREGON Chandler, AZ	85224 4/9/90
Ernestine Seschillie	Box 70 Marble Canyon Az	April 9, 90

04-18

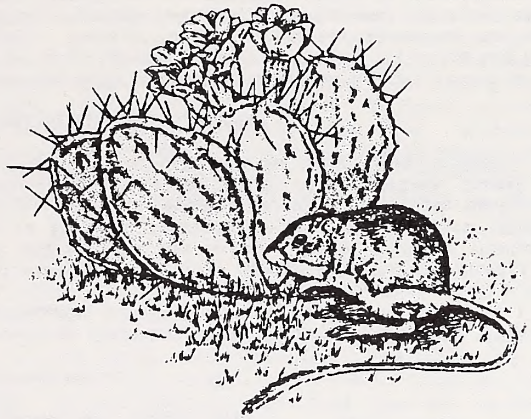
Dennis Curtis
BLM
390 North 3050 East
St George, Utah 84770

Dear Dennis,

We, the undersigned, oppose the airport at Ferry Swale, west of Page, AZ, for the following reasons:

1. The airport is too close to the Wilderness Area.
2. The jets will cause too much noise pollution over Glen Canyon, Marble Canyon, and Paria Canyon.
3. There are too many other, better alternative sites (i.e. to the south or east of Page) that do not adversely impact the Paria Wilderness, Glen Canyon NRA, or Grand Canyon National Park.

NAME	ADDRESS	DATE
Matt Herman	POB 18 Marble Canyon	3/30/90
[illegible]	HC67 Box 1 Marble Canyon	3/30/90
Russell Sullivan	Badger Creek Marble Canyon Az	3-30-90
[illegible]	HC67 Box 1 Marble Canyon	3-30-90
Wendy Reynolds	Hwy 89A Box 65 Marble Canyon	3-31-90
[illegible]	HC67 Box 67 Marble Canyon	3-31-90
[illegible]	Box 121 Marble Canyon	86036 3-31-90
[illegible]	P.O.B 236 Marble Canyon	86036 3/31 96
[illegible]	POB 205 Marble Canyon	86036 4/1/90
[illegible]	P.O.Box 205 Marble Canyon	86036 4/1/90
[illegible]	713 E. Portland Scottsdale AZ	85257 4/1/90
[illegible]	3131 W. SHAWNEE DR. FLAGSTAFF, AZ	86001
[illegible]	P.O. BOX 70 Marble Canyon Az	86036 4-2-90
[illegible]	HC67 Box 1 Marble Canyon	AZ 86036
[illegible]	Box 237 Marble Canyon Az	86036 4/2/90
[illegible]	Box 101 Marble Canyon	AZ 86036 4/4/90
[illegible]	PO 22 Marble Canyon	AZ 86036 4/4/90
[illegible]	PO 238 Marble Canyon	AZ 86032 4-5-90
[illegible]	Po Box 70 Marble Canyon	Az 86036 4-7-90
Julie Kaye Norman	HC67 Box 1 Marble Canyon	4-7-90



4-11-90

cc: Az Congresspeople

Dennis Curtis, BLM
Arizona Strip District
390 N. 3050 East
St George, UT 84770

As residents of Arizona for over ten years, we have spent many beautiful days in Northern Arizona, specifically the Kanab, Lee Ferrys, the Virgin River and the Grand Canyon areas. We have personally experienced the damage that has been caused by OHV activity, mineral exploration and development, timbering and of course grazing.

We urge you to accept Alternative 2 as stated in the EIS and that completion of the final EIS be extended immediately to December of 1992.

Riverbanks have been washed away, fish and their spawning areas have been either stranded or swept away, and endangered wildlife, such as the humpback chub have been threatened with extinction by the water pumped from the Glen Canyon Dam.

We demand that dam operations be changed to provide for more consistent release of the water and that the 1964 Colorado River Basin Act purposes be considered with protecting the fish and wildlife as top priority not power production.
We await your decision.

Best Regards,
Kim Martinez and Larry Ward
2720 E. Sylvia, Phoenix, Az 85032

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
3616 W. Thomas, Suite 6
Phoenix, Arizona 85019

April 11, 1990

MEMORANDUM

To: District Manager, Arizona Strip District, Bureau of Land Management, St. George, Utah

From: Field Supervisor

Subject: Comments on Arizona Strip Resource Management Plan (RMP) and Environmental Impact Statement (EIS)

The Fish and Wildlife Service (FWS) appreciates the opportunity to comment on the subject RMP/EIS for the Arizona Strip District (District). Our comments focus on Areas of Critical Environmental Concern (ACEC), grazing analyses, riparian habitats, species surveys, vegetation manipulation, and maps. The biological opinion, which will conclude formal Section 7 consultation on the RMP/EIS, will be sent under separate cover.

Areas of Critical Environmental Concern

The FWS commends the District on proposing the designation of 445,210 acres of the Arizona Strip as special management areas, including the 59,210 acres proposed as ACECs. These areas contain special resources that deserve and require additional attention and specific management prescriptions. In some areas, we believe that these prescriptions should be strengthened to provide adequate protection for threatened and endangered species. The FWS strongly recommends that the District close the Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring ACECs to Off Road Vehicles (OHV) activities. Although all ACECs would benefit from the exclusion of OHV traffic, these four areas have been established for their cultural resource and endangered plant values, which are extremely sensitive to such activities, and should be protected accordingly. Allowing OHV activities in these areas increases the occurrence of cross-country travel and illegal collection of plants, both of which have contributed to the decline of Siler's pincushion cactus. 1

We also urge the District to close the Fort Pierce, Lost Spring Mountain, Moonshine Ridge, Johnson Spring, Beaver Dam, and Marble Canyon ACECs to mineral location. We are concerned that without closure of these areas to mineral location, the ACEC designations would fail to provide the necessary habitat protection for the recovery of desert tortoise, Siler's pincushion cactus, and Brady pincushion cactus. The FWS believes that mineral location activities are incompatible with sensitive threatened and endangered species. 1

04-20

1. We have considered your suggestion to close the Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring ACECs to off-highway vehicles (OHV). Limiting OHVs to designated roads and trails restricts unauthorized cross-country OHV use. The limited designation is adequate to protect the ACEC resource values.

   Our monitoring studies do not show illegal plant collection to be a problem. OHV impacts have been insignificant in loss of plants. The major source of loss is related to rodents and natural causes. Our data shows that Siler's pincushion cactus since listing in 1979, has had a significant increase from probably fewer than 1,000 to 10,500 actual plants counted on our last census with an estimated total in the habitat of between 30,000 to 50,000.

   Closure to mineral entry would be subject to valid existing rights, including valid mining claims, in effect on the date of withdrawal. Of the areas suggested for closure to mineral locating, most of the Beaver Dam and Marble Canyon ACECs are presently covered by existing mining claims. For this reason, a closure to mineral entry would not preclude or further restrict mineral-related activities in these areas.

   The ACEC designation requires mining exploration and development entities to file a Plan of Operations with BLM for activities beyond casual use. Approval of the Plan of Operations by BLM assures that activities are conducted in a manner that prevents unnecessary or undue degradation, provides protection to non-mineral resources, complies with the Endangered Species Act.

   The three reclaimed Hack Canyon mines are recognized by a major environmental organization as a significant model of just how well prior mining sites can be restored to a natural condition. Based on our experience during the last decade, existing policy and procedures are adequate to allow mineral activities while protecting other important resource values.

04-20 (continued)

Closure of Beaver Dam ACEC to mineral location would mirror the proposed management of the Beaver Dam Slope by the Dixie Resource Area in Utah, which proposes mineral withdrawal for the area. If managed in a cooperative manner, we believe the Bureau of Land Management could effectively designate and manage the Beaver Dam Slope as a Tortoise Management Area. 2

The ACEC designations for Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring appear to include only minimal habitat areas for Siler pincushion cactus. We recommend that these boundaries be expanded to provide a buffer between the sensitive plant species within the ACEC and detrimental activities outside the boundaries. On Fort Pierce, expanded boundaries described in Alternative 3 would include critical watershed areas. Lost Spring Mountain and Moonshine Ridge would benefit greatly from acquisition of State and private lands within and around the perimeters of the proposed ACEC boundaries. Little Black Mountain is an extremely small ACEC and should also be expanded to provide adequate habitat for the persistence of the existing Silar pincushion population. Protection of only small isolated parcels often results in fragmentation of populations that are more susceptible to extinction processes. Larger, contiguous areas are generally more effective in preserving viable populations. 3

Grazing Analyses

The FWS strongly believes that grazing should have been a component of this RMP/EIS. The Varaillion Grazing EIS (1979) and the Shivwits Grazing EIS (1980) are now over ten years old and do not adequately address current conditions on the Arizona Strip. The purpose of the RMP is to resolve key planning issues associated with management of public lands on the District. Exclusion of grazing, perhaps the most important land use on the District, prevents development of a comprehensive RMP. Additionally, grazing should be addressed with respect to proposed ACEC designations and threatened and endangered species habitats. 4

Riparian Areas

The FWS commends the District for the emphasis placed on the protection and management of riparian habitats. The ACEC designation of 8,100 acres along the Virgin River will allow habitat improvement for woundfin, Virgin River Chub, peregrine falcon, and a host of other species associated with riparian habitats. Acquisition of high value riparian private and state properties along the Virgin River, closure of bottomlands to material sales (gravel), limiting OHV activities to designated roads, and requiring a mining plan for operations exceeding casual use will all contribute to habitat improvements

2. Exclusive of existing roads, the Beaver Dam Slope ACEC will be closed to OHV. Exploration or development activity exceeding casual use would require prior bureau approval of a mining plan of operation under 43 CFR 3809. Consultation with USFWS would be required during the processing of any plan which falls within tortoise habitat. Stipulations to avoid or mitigate impacts to tortoise and habitat would be developed at that time. Through this process, the exploration for and development of locatable mineral resources would be accommodated to the extent such activities are compatible with the provisions of the Endangered Species Act.

3. See general response to public comments 1.b.

   Increase in size of ACECs as a buffer would place unnecessary restrictions on other multiple use considerations in the buffer area and result in redundancy of protection measures. The lands included in the proposed addition of a buffer zone do not meet the relevance and importance criteria as outlined in 43 CFR 1610.7-2. Siler's pincushion cactus outside of designated ACECs would still come under protection of the endangered species act.

4. See general response to public comments 4.

04-20 (continued)

from previous disturbances. We urge the District to designate the Beaver Dam/Virgin River confluence area as a riparian demonstration area and manage the 120 acres under a riparian demonstration plan, as described in Alternative 3.

Species Surveys:

The FWS recommends that the District perform surveys in the Blackrock, Parashant, and Mt. Trumbull areas for northern goshawk (Accipiter gentilis), an Arizona Candidate species, and spotted owl (Strix occidentalis), an Arizona State Threatened species and a Federal Candidate Category 2 species.

On November 11, 1989, two new populations of Welsh's milkweed (Asclepias welshii), a species listed as threatened under the Endangered Species Act, were found within the District. The populations are located in the Paria Wilderness Area near the Utah/Arizona state line, approximately thirty miles east of Kanab, Utah. Discussion of this species should be included in the final RMP. 5

Vegetation Manipulation:

Land treatment and vegetation manipulation are listed in Table S-7 as proposed actions under all alternatives in the RMP/EIS. We recommend that such treatment and manipulation not occur in habitat for endangered, threatened, or candidate species, especially that of Brady pincushion cactus, Siler pincushion cactus, Welsh's milkweed, and desert tortoise. We also suggest that most types of vegetation treatment, such as prescribed burning and herbicides, be excluded from use in riparian zones.

Maps:

We found it extremely difficult to compare proposed actions among the various maps provided in the RMP. Some maps, such as "Off-Highway Vehicle Designations," have no reference points. Maps such as "Special Management Areas" have township and range demarcated, but are difficult to compare with maps of different scale such as the large "Arizona Strip District" map. We would appreciate revisions to these maps that would allow easier comparisons. 6

Map III-9, entitled "Vegetation," is difficult to read and should be modified. We recommend that a standard method, such as the Digitized Classification System for Biotic Communities of North America (Brown, 1982), be used to designate vegetation areas. 7

5. The text has been amended to show that Welsh's milkweed may be found on the district.

6. The maps describing the proposed plan have been redone. They now have township and range lines plus other geographic locations.

7. The vegetation map was developed from existing vegetation surveys. It will be updated as better information becomes available through soil and vegetation inventory.

Again, thank you for the opportunity to comment on the Arizona Strip RMP. Should you require further assistance, please contact Sherry Barrett or me (Telephone: 602-379-4729.

Sincerely,

Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico (FWE/HC)
State Director, Bureau of Land Management, Phoenix, Arizona
District Manager, Bureau of Land Management, Phoenix, Arizona



04-21

ARA Leisure Services

Wahweap Lodge & Marina
P.O. Box 1597
Page, Arizona 86040
(602) 645-2433
FAX: (602) 645-5175

April 16, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

Please do not designate Ferry Swale as a Wilderness Area at this time.

An airport is vital to the future economy of the Page Lake Powell area.

We would ask you to support the economic need, as well as consider the millions of visitors that want to come to the area via airplanes.

The greater need for the land use is definitely an airport. Please grant us time for a complete feasibilities study.

Thank you for your consideration.

Sincerely,

Betty Jo Roundtree

Betty Jo Roundtree
General Manager

BJR/ph

04-22

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Barbara Britton

723 E Chinle
Kanab, Ut 84741

APRIL 18, 1990

The Willows Gallery
Donn M. and Melanie Pillmore
24 E. Center Street
Kanab, Utah 84741

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

My wife and I are residents of Kanab, Utah, and we have the following comments on the draft Resource Management Plan for the Arizona Strip District.

We feel the Resource Management Plan underemphasizes the importance of economic development, particularly mineral development, and overemphasizes additional restrictions to promote "remote" recreational experiences. As a local business owner and residents of the area, it is obvious that additional restrictions are not necessary to promote recreation, and in fact will more than likely reduce the amount of recreation enjoyed by the majority of the population which visit this area on an annual basis. The vast majority of people who visit the area are only able to enjoy it from motorized vehicles due to time limitations and lacking in backpacking expertise. Kanab is literally surrounded by national parks, recreation areas, wilderness areas, Indian reservations, game preserves and other federal lands upon which development may not occur. BLM should show a greater appreciation for the value of managing the remaining federal lands under its jurisdiction for multiple use so all Americans and our foreign visitors can enjoy it.

As for economic development is concerned, Energy Fuels is a significant employer in the Kanab and Fredonia area, and essential for the well being of both communities. We believe Energy Fuels is an environmentally responsible company which has a track record at the Hack Canyon mines to demonstrate that mineral resources can be developed on the Arizona Strip District with minimal disturbance of the environment and with significant economic benefit to the local communities. The company and its employees are committed to exploration and development in a manner which has been clearly shown to have only limited, short term impacts. BLM does not need to impose area-wide restrictions on mineral development to ensure that it is done properly. We recommend that you adopt Alternative 4.

Finally, BLM should not use the land use planning process to accomplish what Congress was unwilling to do in 1984. The wilderness study areas which were returned to multiple use under the Arizona Wilderness Act should not now be managed principally to protect their "remoteness". That is, for all practical purposes, the same as making them wilderness areas. Only a very small percentage of the population will ever benefit from additional wilderness areas, most of us will never have the money or time to venture into these area to see the beauty they hold which would be a real crime. In addition, the breccia pipes deposits in the District are a unique natural resource of national significance. BLM should do its part to see that such resources are properly developed. It should clarify that the Resource Management Plan is not intended to preclude mineral development, and multiple use, except in areas which are specifically proposed for wilderness area.

Sincerely,

Donn M. Pillmore

Melanie Pillmore

Melanie Pillmore

THE WILDLIFE SOCIETY, ARIZONA CHAPTER
P.O. Box 11135
Phoenix, AZ 85061-1135

April 20, 1990

G. William Lamb, District Manager
Arizona Strip District
US Bureau of Land Management
390 North, 3050 East
St. George, Utah 84770

Dear Mr. Lamb:

Re: Review of Arizona Strip Resource Management Plan (RMP) and Environmental Impact Statement.

On behalf of the Arizona Chapter of The Wildlife Society, I appreciate the opportunity to comment upon the Resource Management Plan and EIS. The District has put forward a commendable effort to review and examine alternative modes of management for the Arizona Strip. On the whole, the Society was impressed with the effort and the results. There are a few areas where I felt specific comment was necessary.

Proposals to designate 445,210 acres of the Strip as special management areas (including nearly 60,000 acres as ACEC's) are enlightened management options, and the Society supports those proposals. However, if the District seriously intends to meet its objectives, off highway vehicle traffic should be precluded from at least some of these areas. While all of these areas would benefit from OHV prohibition, several in particular emerge as crucial locations. These include the Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring ACEC's. 1

Fort Pierce, Lost Spring Mountain, Mineral Ridge, Johnson Spring, Beaver Dam, and Marble Canyon ACEC's should be closed to mineral locating as well. Desert tortoise recovery, as well as the recovery of several special status plants, would be unlikely without this protection. The Beaver Dam slope area, in particular, should be considered as a tortoise management area. Consequently coordination with the Dixie Resource Area in Utah would be essential to assure the desert tortoise the protection it is due. 2

04-24

1. Your suggestion to preclude OHV traffic in at least some of the ACECs was proposed in the draft RMP for Beaver Dam and Marble Canyon ACECs. In the remainder of the ACECs, OHVs were limited to designated roads and trails (LDRT). This OHV designation restricts unauthorized cross-country OHV use while allowing travel on designated roads and trails for other public land users in the area. Many of these ACECs contain roads which control access to public lands outside the ACEC. This level of protection is adequate for the resources covered by designated ACECs while allowing vehicle use on designated roads left open.

2. See general response to public comments 2.

   Mineral Ridge is not an ACEC proposed in the plan or any of it's alternatives.

Care should be taken in all proposals to insure that wildlife habitat is not fragmented, minimizing the value of any of special management areas. Boundaries should be expanded to provide appropriate buffer zones between sensitive plant or animal habitats and outside disturbances. Expanded boundaries to include critical watershed areas, and expansions that include acquisition of critical state or private parcels may reduce likelihood of extirpation of sensitive species. 3

Recently, great emphasis has been placed upon riparian areas, and the District has seized upon the opportunities presented by this RMP. It is essential that the District consider management of the Beaver Dam Wash confluence with the Virgin River as a special riparian area. The demonstration plan suggested in Alternative 3 seems to be an appropriate measure.

Important wildlife species, in addition to desert tortoise, are found within several of the areas described in the RMP. Surveys of northern goshawk and spotted owl in the Blackrock, Parashant, and Mt. Trumbull areas would prove most helpful.

There are several additional broad issues that should be addressed. The question of vegetation manipulation, including burning and herbicide treatments, must be approached carefully. Any such treatments should be excluded from riparian areas. Further, there was no treatment of grazing issues within the RMP. This is an issue of the utmost delicacy and importance. Grazing issues must be included in the RMP/EIS. 4

I welcome the opportunity to discuss these issues, and hope that the comments I have provided on behalf of the Society are of value in your review.

Sincerely,

Ray Lee,
President

RL:LR:lr

cc: Sam Spiller, US Fish and Wildlife Service
Duane Shoufe, Arizona Game and Fish Department

04-24 (continued)

3. District wildlife habitat is managed by six habitat management plan (HMPs). HMP boundaries reflect wildlife habitat areas. These plans help ensure management actions are coordinated and eliminate a fragmentation of species habitat.

   See general response to public comments 1.i.

4. All land treatments are subject to EAs. Also, the subject has been analyzed in the draft environmental statement on Vegetation Treatment on BLM Lands in the Thirteen Western States which was incorporated by reference. Also see general response to public comments 4.

KANAB CITY
76 North Main #14
Kanab, Utah 84741
(801) 644-2534

Mayor
Bernie Ripper
City Manager
Keith L. McAllister
Treasurer
RaeLene Johnson

April 25, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

On behalf of Kanab City, I am writing to comment on the draft Arizona Strip Resource Management plan.

Federal law requires that BLM coordinate with and consider the views of local government in the development of its resource management plans and that BLM's plans be consistent with the views of local government to the maximum extent possible. However, I do not see evidence in the RMP that BLM is attempting to do so. The draft acknowledges that local interests favor multiple use management but then selects a much more restrictive alternative as the preferred alternative. I encourage you to select alternative 4 as the preferred alternative in the final RMP. 1

As you state in the draft RMP, less than five percent of Arizona Strip District is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching and other multiple uses of public lands to contribute to the economic well being of the area. The area already has more land devoted to national parks, recreation areas, game preserves, wilderness areas, wilderness study areas, etc., than nearly any other area in the country. On balance, we need to increase rather than decrease opportunities for economic development in the region. Imposing additional restrictions on the use of the limited remaining public lands which are open to multiple use to promote backpacking or protect scenic vistas is simply inconsistent with the continued viability of our communities. The RMP should clarify that BLM does not intend to preclude properly regulated economic development in areas such as Guideline Areas "B". 2

1. Between October 1987 and June 1989, sixteen public meetings were held including two in Fredonia, Arizona to obtain the views of the public and local governments prior to development of the RMP. In addition, three separate meetings were held with the district's Grazing Advisory Board and Advisory Council. Members of these groups reflect local views. The public is always welcome to attend these meetings. Additional efforts were also made by mailing four different Arizona Strip Advisories to over 500 individuals, groups and local governments to keep them informed as to what phase the RMP is in and to solicit comments.

2. A major objective of the proposed RMP is to manage the public lands for multiple use. No new mineral withdrawals have been proposed. The Area B guideline only provided guidance for developing the land use plan. They are not management designations. See text change on page II-3.

Mr. Dennis Curtis
April 25, 1990

Finally, BLM should promote the development of important natural resources on public lands. As you note in the RMP, we are fortunate to have unique and important breccia pipe mineral deposits within the Arizona Strip. It has been shown that they can be developed without harming other important resources. I encourage you to manage the District to ensure access to and make the development of such deposits possible. we understand that BLM's intention is not to impose restrictions that would prevent the type of mining that has occurred in the District during the past decade. However, that intention is not clear from the RMP. | 3

Sincerely,

Bernie Ripper

Bernie Ripper
Mayor

BR/rhj

04-25 (continued)

3. The proposed RMP does not withdraw any new land from mining under the 1872 Mining Law. The plan however, does impose restrictions on mining activities similar to those currently followed by existing uranium mining companies.

   See comment response 04-26-02.

04-26

April 25, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to express my views on the draft Resource Management Plan for the Arizona Strip District. I feel that the area in and around the Arizona Strip already has more land devoted to national parks, recreation areas, game preservers, wilderness areas, wilderness study areas, etc. than nearly any other area in the country. A large portion of the Strip such as the 265,000 acres of wilderness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in the region. Imposing multiple restrictions on the use of the limited remaining public lands to promote back-packing or protect scenic vistas is inconsistent with the continued viability of our communities.

The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area, we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires the BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land. Therefore, I favor the elimination of "Guideline area B" and the adoption of alternative 4. | 1

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas. | 2

Sincerely,

Julie Ingersoll

Julie Ingersoll
364 No. 300 E. #57
Kanab, Utah 84741

1. Managing public lands for multiple use is a basic planning criteria on a major objective of the proposed RMP. This is stated twice in the Summary, once in Chapter I and twice in Chapter II. Also, see response to general public concerns 1.

2. Management prescriptions under the preferred alternative would not preclude multiple use, or more specifically, mineral development. The bureau is directed by the FLPMA to manage the public lands in a manner which recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from the public land. Furthermore, it is bureau policy to encourage and facilitate private industry in the development of mineral resources on public lands in a manner that satisfies the national and local needs and provides for economically and environmentally sound exploration, extraction and reclamation practices. Also, see response to general public concerns page V-5.

04-27

726 South 175 East, #123
Kanab, Utah 84741
April 25, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District, as a Grazing Permittee, Mineral Explorationist, Kanab City Councilman and a concerned citizen.

The draft RMP overemphasizes management for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels, apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip, and to do so they propose to create several new special management areas (ACEC's, Special Recreation Management Areas, Resource Conservation Areas and Category "B" areas). Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

Development on the Strip is limited by various natural characteristics of the area (rugged terrain, deep canyons, lack of water, etc.). There is no basis to suggest that the basic "remoteness" of the area is presently threatened in any respect. 1

The additional regulations proposed in the RMP will adversely affect local communities. Because of existing federal restrictions imposed throughout the region and the relatively limited private land in the region, the communities located within or near the District are extremely sensitive to further federal restrictions on the use of the limited land which is not already withdrawn from commercial development.

The BLM is doing a good job managing the District. Federal law does not require that BLM change its existing management practices, only that it must review them. The District certainly does not need to place more restrictions on multiple use. Therefore, I request that you select Alternative One, and continue to manage the Arizona Strip wholly as multiple use.

Sincerely,

John O. Vaughn

1. Human activity of any kind and its related impacts reduce the quality of remoteness in a remote area for many people who identify with and seek this value. The goal of protecting the Strip's remoteness value is to maintain the recreational opportunities in back country natural-appearing settings. This goal was discussed in depth under the Remoteness Component section, Chapter III, pg. 39. Also, see general response to public concerns page V-5.

Fredonia Natural Resource Conservation District
Fredonia, Arizona 86022

April 24, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 Esst
St. George, Utah 84770

Dear Mr. Curtis:

I am writing in response to the BLM's draft Resource Management Plan for the Arizona Strip District.

While I realize the need for reaponsible management ia crucial in this srea, I strongly feel that more restrictiona on multiple use of public lands ia not what we need. There is very little private land in the Arizona Strip contributing to the local tax base, aa a result people in this area depend on multiple uses of public lands such as ranching and mining, to contribute to the economic well being of the area. The land uae restrictions aet forth in the draft RMP will aignificantly reduce the potential of the Arizona Strip Diatrict to maintain a complete range of commericial land uses. We need to increase rather than decrease any possibilities for economic development. 1

Much of the land proposed for additional restrictive management is the same land that waa recently studied and released from wildernesa designation by Congress. However, the RMP'a new restriction on these lands would, for all practical purposes, make them wilderness areas again. This land needs to be returned to multiple use with no additional restrictions. I would suggest the elimination of "Guidline Area B" and the adoption of alternative [1 or 4].

Federal law doea not require that the BLM change its management practices, only that is must review them. The Arizona Strip District definately does not need more restrictiona on multiple use.

Sincerely,

C. Paul McCormick
C.Paul McCormick
Chairman, Fredonia NRCD

04-28

1. None of the present commercial land uses on the Arizona Strip have been eliminated by the proposed RMP; however, it may be more difficult and expensive to do some types of business. The reason additional constraints are being placed on various land use is the increasing demand for public land resources and public concerns.

04-29

Page-Lake Powell
Chamber of Commerce
VISITOR & CONVENTION BUREAU
P.O. Box 727, Page, Arizona 86040 --:-- Telephone: (602) 645-2741

April 24, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

V-121

The Page/Lake Powell Chamber of Commerce, representing over two hundred businesses in the Page area who will be affected by the decision of the BLM, wishes to comment on the draft RMP for the Arizona Strip District.

We feel most definitely the area of Ferry Swale and the public lands in Arizona around this area are vital to the continued steady growth of Page/Lake Powell as well as not limiting opportunity to others.

As noted in Gruen & Associates airport plan, a larger, more versatile airport - one with an industrial air park attached will be needed in the future - perhaps as long as 10 years. but not the 25 of the RMP.

The nature of the land overall for an expanded airport make it impossible to use the present location.

You have strongly suggested other sites should be looked at beyond the Swale area. Several miles south of Page - there is adequate space - 10 miles east of Page there is also adequate space - the problem being it is on the Navajo Reservation. While the landing strip itself could undoubtedly be worked out between both entities - the present tribal laws governing businesses owned by anglos could be detrimental to the proposed program of development, creating an impossible situation. 1

We do not propose nor do we support the idea of wholesale development of public lands, however it is distressing to us that as the Federal dollar shrinks so does the accessible

1. BLM recognizes the city's potential need for a better airport within a decade as well as the importance of planning ahead with regard to growth and economic development. Moreover, we look forward to working closely with city officials in the site selection process so that Page can continue to grow and prosper in a manner sensitive to the natural features which make this area so popular to visitors.

   When the Alternative Site Study is completed and it demonstrates to BLM that the Ferry Swale area is the best location for an airport, considering all factors, we will take necessary action to process the application.

04-29 (continued)

Page Two Dennis Curtis - BLM

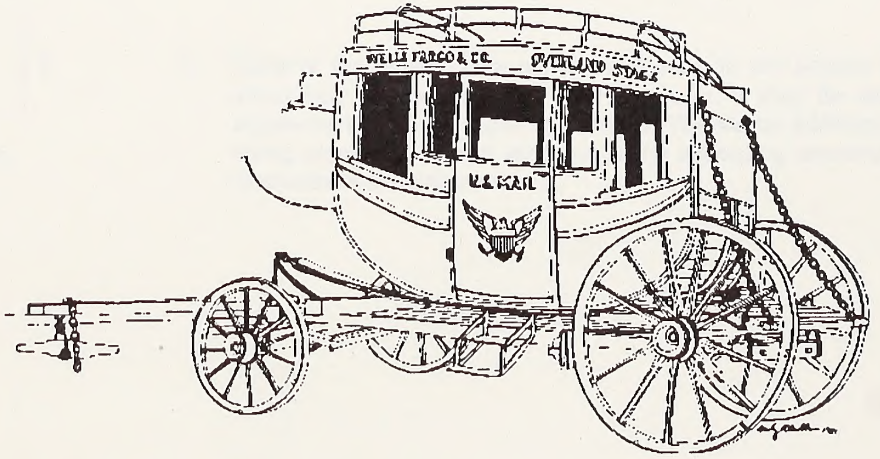
public lands!

The Arizona Strip Office does an excellent job of managing the present resource with its multiple use designation. We would use an old phrase to explain our feelings - "if it ain't broke - don't fix it". The ultimate we could hope for would be to do nothing - we do not believe that will happen, so we ask for Alternative 4 allowing room for a future Page/Lake Powell Airport and leaving room for other options.

Sincerely,

Sonny Sell
President

PAGE/LAKE POWELL CHAMBER OF COMMERCE



PLATEAU GROUP BOX 15 FLAGSTAFF, AZ 86001

Dennis Curtis, Planning Team Leader
Arizona Strip District Office
390 North 3050 East
St. George, Utah 84770

February 9, 1989

Mr. Curtis:

Enclosed are the comments of the Plateau Group of the Sierra Club regarding the BLM Arizona Strip District Draft Resource Management Plan and Environmental Impact Statement. Our concerns on the matters addressed by this RMP and EIS are well documented through numerous letters, published articles, and input at all public scoping meetings. We have been involved in the process that resulted in this RMP since its inception over three years ago. Before that we were instrumental in raising most if not all of the issues this document is supposed to address. In light of our well documented concern and long term involvement in this process we feel this Draft RMP does not address our concerns nor does it satisfy the legal requirements placed upon it by NEPA.

This document first fails to satisfy NEPA requirements by failing to offer a broad enough range of alternatives.

For instance, both Alternative 2 (the preferred alternative) and Alternative 3 (the "environmental alternative) would include the same acreage of Special Management Areas. And both alternatives would result in virtually the same acreage of surface disturbance while nearly the same areas unprotected. 1

04-30

1. The National Environmental Policy Act of 1969, Section 102(C)(iii) states that alternatives to the proposal must be considered. The Council on Environmental Quality regulations states that agencies shall "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from study, briefly discuss the reasons for their having been eliminated" (40 CFR 1502.14(a)).

   There are appreciable differences in the alternatives discussed in the draft RMP/EIS. Tables II-1 and II-2 show those differences according to the range from No Action to Preservation and Consumption options.

   See text change on page II-4 discussing why an alternative with large withdrawals was not included in the document.

04-30 (continued)

Issues drive the NEPA process. When issues raised are not adequately addressed, the process and the document has failed. Issues of major concern to the Plateau Group are:

1. **Mineral withdrawals**: We asked for mineral withdrawals for areas too sensitive to withstand the increased access and environmental disturbance resulting from mining. There were no withdrawals in the preferred alternative, in fact the amount of land available for mining was actually increased. 2

2. Tens of thousands of mining claims have been filed on the strip. No **worse case scenario** is included in this plan nor is any provision included which would protect 3
resources on the strip in the case of a renewal of feverish mining development as already occurred in the early 1980's

3. We asked that the highest levels of reclamation be required on all mining developments on the Strip. Rob Roudabush, BLM Vermillion Resource Area Manager, said that to do so might offend the mining company involved. The BLM has shown no such reluctance to offend environmentalists.

4. Out of an area of 2.8 million acres of some of the most spectacularly remote land in the west the most the BLM has found to be worthy of designation as **Areas of Special Environmental Concern** in the preferred alternative is 59,210 acres or a measley 2%. In this alternative even these few areas would not be protected from mineral entry. 4

5. We asked for adequate protection of the Strip's rich and widespread archaeological resources. We feel that the fact that virtually all cultural sites, including the most significant, remain open to mining activities is unacceptable. Merely requiring mitigation is insufficient protection

04-30 (continued)

2. Mineral withdrawals, in addition to those areas currently withdrawn through wilderness designation, were considered in Alternative 3 of the draft RMP/EIS. The analysis in the RMP/EIS determined that sufficient regulatory constraints exist which would accommodate locatable mineral exploration and development while assuring protection of nonmineral resource values. Withdrawals proposed for revocation were not found necessary due to subsequent withdrawal through wilderness designation (Virgin River Scenic Withdrawal) or because the need for the original withdrawal is no longer valid (PLO 3701 and Boulder Canyon withdrawals). Also, see page II-4 of the final RMP/EIS (alternatives considered but not analyzed).

3. Current CEQ regulations require analysis of reasonably foreseeable significant adverse impacts (40 CFR 1500, as amended). The analysis of a "worst case scenario" is no longer required. The analysis presented in the draft RMP/EIS conforms to the current CEQ guidance. The reasonably foreseeable impacts presented in Appendix 31 are based on impacts which have occurred over the past nine years. The nine years of data on which the projections are based include a complete cycle of extensive exploration and development. Thus, even though a "worst case scenario" was not specifically analyzed in the document, the analysis presented deals with the possibility that another cycle of extensive exploration and development could occur.

4. ACEC designations highlight areas where special management attention is needed to protect, and prevent irreparable damage to, important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. In order to qualify as an ACEC, the area under consideration must meet the relevance and importance criteria as outlined in 43 CFR 1610.7-2. In addition to the proposed ACECs, Congress designated 265,600 acres as wilderness on BLM administered lands on the Arizona Strip in 1984. These lands, as well as other withdrawn lands shown in Appendix 31, need to be included in your analysis.

6. **Range improvements** may include chaining and herbiciding pinyon juniper stands. This is unacceptable

7. At every stage of the process we asked that measures recommended by the Arizona Game and Fish Department to minimize conflicts between ranchers and mountain lions be adopted, since those conflicts generally result in indiscriminate slaughters of the lions. No such provision was included in any alternative. 5

8. We asked that provisions be included in the plan to protect Grand Canyon National Park from adverse effects which, according to former Park Superintendent Marks, it has already experienced as a result of mining activities on adjacent BLM lands. The preferred alternative provides no protection for many of those areas and inadequate protection for the rest.

9. We asked that a full assessment of the cumulative impacts of mining and exploration to this point as well as a projection of future cumulative impacts be included with the RMP document. Considering how things are going, it's obvious that the EIS accompanying the plan is not going to address this. 6

10. We asked for adequate protection of surface and groundwater including the declaring of some sensitive riparian areas and intermittent drainages be declared off limits to mining. You included no such provisions. 7

11. **Forest Resource:** We asked that no commercial timber sales be planned for ponderosa stands on the Strip, because such sales would waste valuable habitat while having to be subsidized in the first place. The prime use of these lands is as a biologic and recreational resource. 8

04-30 (continued)

5. Approval of animal damage control actions on BLM public lands is subject to EAs which involve public review. Coordination with the Arizona Game and Fish Department as well as the U. S. Fish and Wildlife Service occurs prior to the approval of the Animal Damage Control Plan. This coordination effort helps to identify any perceived conflicts and formulates actions which will rectify the situation.

6. In Chapter III of the RMP/EIS is a section titled "Cumulative Changes in the Existing Environment (1878-1988). In Chapter IV there is a cumulative impact analysis of each alternative. These sections specifically address cumulative impacts of mining and exploration to date, as well as projections of future cumulative impacts. The mineral related impacts are clearly laid out in Appendix 28 of the draft RMP/EIS and they were specifically analyzed in this document.

7. Evaluation of the effects of mining on surface and groundwater occurs in site-specific EAs for mining plans and exploration. All activities are heavily mitigated and reclamation of disturbances are mandatory. Mining companies are well informed and are committed to protect ground and surface water and riparian areas. NEPA, HAZMAT and a host of other federal and state environmental regulations give the state and BLM the authority to regulate mining. The Arizona Strip BLM has had no problems on this issue and is confident of handling the situation in an environmentally sound manner. Therefore, declaring all riparian areas and drainages off limits to mining is unnecessary. The Virgin River Gorge riparian area is withdrawn from minerals primarily to protect the areas visual resources. We would appreciate help in locating any riparian areas or significant drainages which have been irreversibly degraded by recent mining.

8. See general response to public comments page V-9.

04-30 (continued)

The Draft EIS states that ponderosa pine will be managed for "other uses". Please explain what these other uses are. What are managment directions which will be implemented? What class and amount of new roads will be constructed or rebuilt to achieve proposed forest managment. 8

In the "Affected Environment" section there is no description of the affected environment. Please address the following: Age classes and vertical/horizontal diversity of stands. Health of stands (i.e. mistletoe infestations or other disease problems). Endangered or threatened animal species. ROS classes and road densities found in the pine type. Fire dangers and excess fuels problems. 9

12. The number and size of ACEC's should be increased. Areas that we suggest be included are: 10

1. Kanab Creek, if it isn't unique then neither is the Grand Canyon.
2. Lower House Rock Valley
3. The Witch Pool ACEC should be increased to at least 1,000 acres.
4. Marble Canyon ACEC should be increased in the preferred alternative to 15,000 acres.
5. Andrus Canyon should be designated an ACEC.

Exactly how much consideration our concerns received in this plan was made apparent at March 1990 public meeting in Flagstaff where Dennis Curtis and the other members of the planning team presented the draft Plan. When asked why a concern over predator control by grazing permittees did not appear in the RMP in spite of the fact that we had entered that issue into the record at two scoping meetings, in written comments, at one preliminary review meeting and one BLM State Advisory Council Meeting, Dennis Curtis said, "I guess we forgot." It seems as though a lot of our concerns have been forgotten in this document.

04-30 (continued)

9. The information requested is more detail than is intended to be included in the RMP/EIS. Much of this information is available in the MSA at the district office and the public is welcome to review it.

10. See Kanab Creek general response to public comments page V-6.

LOWER HOUSE ROCK VALLEY: The lower House Rock Valley does not meet the relevance and importance criteria for an ACEC.

WITCH POOL: The acreage for Witch Pool ACEC is based on our best available information and covers the known important values. See general response to public comments page V-7.

MARBLE CANYON: See general response to public comments page V-6.

ANDRUS CANYON: See general response to public comments page V-7.

04-30 (continued)

We regret that you have chosen to give environmental considerations the short end of the stick in this draft RMP. We believe that a document built on such a foundation is inadequate to the task for which it is being written. This is, after all a precedent setting plan - the first by the BLM which would have broad impacts on mining development. As such the draft RMP is inadequate and unacceptable. It will surely be appealed unless significant changes are made to reflect the concerns listed here.

Respectfully Submitted,

Dan Dagget
Conservation Chair
Plateau Group
Sierra Club

c.c.
Senator John McCain
Congressman Mo Udall
Dean Bibles
Lori Potter, SCLDFF

04-31

Dear Mr. Curtis:

After reviewing the AZ. Strip District RMP + EIS Draft, I have concluded that Alternative "3" best addresses my concerns for the environment of this unique area.

I feel we are very fortunate to be able to have such an area to even consider, let alone make judgements concerning its future, that I hope that all concerned will keep this in mind as they iron out all the various issues in this process.

Please remember the future generations as you decide the fate of the unique and varied landscape.

Thank you for the chance to voice my opinion on this most urgent subject.

Sincerely,
John Pampeian

04-32

THE DESERT TORTOISE COUNCIL

5319 Cerritos Avenue
Long Beach, California 90805

April 11, 1990

Mr. William Lamb, District Manager
Arizona Strip District Office
Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

Dear Mr. Lamb:

The Desert Tortoise Council has reviewed the draft Resource Management Plan for the Arizona Strip District and offers the following comments.

First off, we are cautiously optimistic that this draft represents sincere efforts by BLM to improve the desert tortoise situation on the Beaver Dam Slope. We have concerns discussed later about the Pakoon area and the Virgin Slopes.

S-15. Alternative 3 is the only one showing an ACEC for the Beaver Dam Slope tortoise habitat. | 1

II-65 Map II-16 is much too difficult to read. It has no reference townships, and cannot be matched well with other maps in the draft. | 2

II-5. No special Management areas in preferred alternative for the desert tortoise is indicated. | 1

II-19. Beaver Dam Slope ACEC is mentioned. We believe the categories should be the same in all alternatives, as you have done.

II-20. What does the seasonal restriction may be used mean? How and when will it be used? Weasel words like this usually mean to us that the action will not be taken. | 3

II-25. Alternative 2. AMPs on remaining Desert tortoise allotments would be completed. We encourage BLM to do this under any alternative where desert tortoise habitat objectives are needed.

II-39. Prescriptions for lands are poor. Give Rights Of Ways to the applicant and hurt the tortoise as little as possible. This does not match well with the Desert Tortoise "Rangewide Plan", the draft Arizona Implementation Strategy for Management of the Desert Tortoise, nor statements on IV-36 about closing corridors. | 4

We strongly suggest a moratorium on cattle grazing on the Beaver Dam Slope and the Pakoon until research proves livestock grazing has no impact. Grazing may affect the desert tortoise. BLM at a minimum should consult with the U.S. Fish and Wildlife Service on this federal activity authorized on federal land. Preliminary | 5

1. Special Management Areas, including ACECs for Alternative 2 and 3 are identified in Table S-1, page S-4 and Table S-2, page S-6. Omission from this table was an error.

2. This map has been redone. Townships and range lines are now labeled.

3. Seasonal restrictions lessen perceived potential impacts from any proposed action. Mitigation developed through consultation with USFWS could call for required seasonal restrictions.

4. Prior to granting any right-of-way across desert tortoise habitat, Section 7 consultation would occur to assure minimum impacts to the tortoise (see II-16). The reason a specific corridor was not identified was to provide maximum flexibility to avoid adverse impact to the tortoise.

5. In the near future a Biological Assessment of Livestock Grazing on the Arizona Strip will be sent to the USFWS for consultation and evaluation of the grazing program.

   Currently, the evidence for a moratorium on livestock grazing is inconclusive. Livestock impacts on the desert tortoise are still under study and will remain so until contradictory data and questions are reconciled.

results of earlier physiological/pathological studies indicated likelihood of malnutrition. These areas are not rich in forage to begin with.

The plan is not very clear about the large amount of desert tortoise habitat not on the Beaver Dam Slope. We see no guidelines, prescriptions, opportunities, or other measures called for in the Supplemental Program Guidance for your RMP development. These areas (like the Pakoon) should have at least the same prescriptions as the BDS ACEC on any Category 1 or 2 tortoise areas. 6

II-50 and 51. Guideline areas. The tortoise map does not match well, but tortoises should be in Area B for both alternative 2 and 3. Tortoises and their habitat constitute those areas where BLM identifies the qualities of "B" Areas. Desert Tortoise habitat should not be wide-open multiple use land. Not having desert tortoise Category 1 and 2 habitat as Area B for your guidelines is inconsistent with what the plan says in other instances it is doing for the desert tortoise. 7

II-53 and 54. Appears some tortoise habitat is shown for exchange or sale. We strongly disagree with this unless better value desert tortoise is blocked up with such an action. 8

III-19. Good discussion on the desert tortoise here, but much discussion of resource attributes that would be affected by the features of the alternatives so a cause-effect relationship can be set up for dealing with the environmental consequences section.

The desert tortoise was federally listed threatened recently. 9

III-20. BLM acquired 1,600 acres recently, but how much was disposed of in the last four years? 10

IV-8. There should not be a powerline/pipeline corridor through category 1 federally listed desert tortoise habitat. 11

IV-9. Table IV-2. The status of the desert tortoise is now threatened. 9

IV-36. What about other utility corridors? All tortoise habitat ould not have corridors, or just Category 1 or 2? This conflicts with statements on IV-8. 12

IV-37. Minerals first paragraph. How would BLM disallow mining that would adversely impact a special status species? We are often told there is nothing that can stop mineral development in the case of an unlisted species, say a Candidate category 1 species. 13

04-32 (continued)

6. The Beaver Dam Slope is subject to disturbance from human activities, i.e.: collection, dogs, existing mining claims, existing utility corridor, off highway vehicles and existing roads. The Pakoon area is more remote and is not likely to be subject to the above disturbances in the near future. All areas which contain tortoise are subject to consultation with USFWS prior to the approval of any bureau-authorized project.

7. Desert tortoise habitat is managed under most of the B guidelines. A large ACEC is proposed; OHVs are limited to designated roads and trails and special oil and gas leasing stipulations are proposed. These actions plus compliance with the Endangered Species Act should provide adequate protection for the species.

8. Prior to completion of any land exchange involving possible desert tortoise habitat, Section 7 consultation will be done to assure a net effect that is positive for the tortoise in accordance with the Endangered Species Act (see II-16).

9. Corrections made, pages III-16, A-21, A-52.

10. No public lands have been disposed of in desert tortoise habitat within the last four years. Currently, 165.87 acres are in the process of being exchanged out of federal ownership in the Colorado City area (no tortoise habitat is involved.)

11. There is already a right-of-way utility route through Category I federally-listed desert tortoise habitat that is necessary for human needs. An EA and Section 7 consultation would be required with every new right-of-way application.

12. The right-of-way corridor paragraph in IV-36 refers to all categories of tortoise. There would be no designated corridor in the area.

13. Under the management prescription outlined in the preferred alternative, ACECs would be designated for the protection of special status species. Once an area is designated as an ACEC, all locatable mineral exploration or development activities exceeding casual use would require prior submission and approval of a plan of operation. The approval of a plan of operation is a federal action. Any activity proposed under a plan which would adversely impact a listed species or habitat would require consultation with the U. S. Fish and Wildlife Service to be undertaken by the Bureau. Through this process, the Bureau assures that approval of the action would not likely jeopardize the continued existence of any listed specie or the adverse modification of critical habitat. If the approval of any action would not fulfill the requirements of the Endangered Species Act, it would not be approved. The intent, however, is not to stop the mining operation but to eliminate conflicts with listed species or habitat. To the extent that this can be accomplished, mineral exploration and development will be accommodated.

04-32 (continued)

IV-62. Fewer acres are disposed of in Category 3 habitat in this alternative. We strongly suggest that this is much more acceptable than Alternative 2. with respect to impacts on the desert tortoise.

A-10 and 11. Monitoring and Evaluation. The desert tortoise is not under special status species as in earlier sections. The desert tortoise is broken down to two items, but the same measures and criteria for decisions are described. We do not understand the two items' meaning. 14

We failed to see in the draft where BLM is consulting under Section 7 of the Endangered Species Act on this plan. Actions in this plan look like <u>may affect</u> situations to us. 15

With the exception of the vagueness of management on the Pakoon and Virgin Slopes, this RMP looks like a good direction for management. We believe the RMP does not show the distinct significant improvement of Alternative 3 over Alternative 2 as regards the desert tortoise. We strongly suggest the BLM accept management of desert tortoise habitat as proposed in Alternative 3 as the beneficial impacts are needed for recovery of this species. We also believe BLM's A Area and B Area guidelines need to be modified so that desert tortoise habitat is put under the more restrictive guidelines for areas with sensitive resources.

We appreciate the opportunity to comment on this draft.

Sincerely,

J. A. St. Amant
Senior Co-chairman

04-32 (continued)

14. Correction made, pages III-16, A-21, A-52. Both relative densities and impacts to those densities from land use activities will be measured as per identified techniques and units of measure.

15. The draft RMP/EIS was sent to U. S. Fish and Wildlife Service for formal consultation. The results of that consultation are found in this document on page V-9.

Wizards Motorcycle Club
554 East 11800 South
Draper, Utah 84020
801-571-7485

Bureau of Land Management
c/o George W. Cropper
Arizona Strip District
225 North Bluff Street
St. George, Utah 84770

April 18, 1990

Re: Proposed planning of Arizona Strip District Management Plan and Environmental Impact Statement.

The Wizards M/C is involved in the land use in the Arizona Strip District area having a special use permit to hold the Rhino Rally Motorcycle race. For the past seven years we have leased ground for the event in February of each year. This event is very popular because of the winter climate and beautiful terrain. Motorcycle desert racing is a family oriented sport with 80% of the entries coming from family members planning, traveling and participating in this sport together.

This surely must be a magic formula for raising kids because these kids are not involved in todays problems that seem to plague young people growing up under all of todays influences. The importance of having areas set aside for OHV use is as important as anything we face today. We must protect the land as well as our youth with the right education and planning so people can use our lands and preserve it at the same time.

The Arizona Strip District area of the BLM is looking at all land users as having an important part in the planning of future use and environmental impact these uses might impose. The Wizards M/C members and users are making every effort to work with and support the efforts of the BLM. Their suggestions and regulations have been followed by us each year from start to closing and final inspection of the area.

We would support Alternate 1 in the proposed planning as it seems to be more adaptable to OHV use, but because there are no open OHV areas designated in the Arizona Strip District, we would request that all existing roads, trails and washes be designated for OHV use as these roads, trails and washes would not have any environmental impacts on vegitation or habitat in the area. We would also need special use permits to be issued to cross over terrain to connect washes or roads only when necessary to avoid an area that might have an environmental problem.

We are an organized body of OHV users that want to protect the land and the environment. We are also willing to offer service to protect this privilege and help preserve this land and the habitat we use.

The Wizards members are willing to help the BLM, private land owners and ranchers with problems that might arise from the results of our using the lands in this area.

Please contact us at 554 East 11800 South Draper, Utah 84020 or call 801-571-7485 c/o Terry Bland / Chairman of the Board of the Wizards Motorcycle Club.

Sincerely,

Terry Bland

Chairman of the Board
Wizards M/C

V-131

05-01

May 1, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

The Resource Management Plan draft for the Arizona Strip causes me great concern. If Alternatives 2 or 3 are adopted, we could be severly affected by these changes.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Ed Bundy

05-02

May 5, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Your decision to put more of our public land into wilderness will cause a great economic stress on the residents of Northern Arizona and Southern Utah. The proposed management prescriptions will adversely affect important segments of the public.

As a result of existing federal restrictions imposed throughout the region, and the relatively limited private land in the region, the communities contained within or located very near to the Arizona Strip District are extremely sensitive to further federal restrictions on the use of this limited land.

The Resource Management Plan lists 4 different alternatives that are being reviewed by the BLM. I am in support of #4. Keep these lands available to the needs of all!

Thank you,

M. Rick Stewart
P.O. Box 176
Kanab, Ut 84741

NORTHERN ARIZONA FORENSIC LABORATORY
James L. "John" Hale, Jr. - Examiner of Questioned Documents
P.O. Box 411 - Chino Valley, Arizona 86323
(602) 636-5550

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 East
St. George, Utah 84770

Re: Resource Management Plan (Arizona Strip)

Dear Mr. Curtis:

It has come to my attention that your agency is considering the amendment of uses of the Arizona Strip portion of our state. This distresses me greatly for several reasons. Please consider my position on the possible reduction in usage of this area.

Firstly, as a Chino Valley Town Councilman, I am acutely aware of the dire condition of the economy of our State. Our current deficit is vast, and for the short-term, almost insurmountable. Any reduction in the taxation that multiple-use has provided in the past and that could be provided in the future must not occur, as it will be another blow to our State's income, and will certainly further the burden on our citizenry.

Secondly, as a Forensic Consultant involved in the Charles Keating matter, I am aware, as perhaps you are, that our Nation's own financial woes will be dealt a devastating blow when the FSLIC bills start arriving. As recently as last evening, the news from our Capitol was "Read My Lips" probably isn't going to be a fulfilling promise. As you are a Federal Employee, I feel you should be as concerned as I am regarding the reduction of I.R.S. income that would be incurred as a result of amending the multiple-use of the Arizona Strip. I feel the U.S. and Arizona State Governments need all the taxable income that can be generated at this time, and that reductions of any kind of income will certainly be counter-productive.

Thirdly, from an historical aspect, many families have based their livelihood on this region. Some, including my uncle, Luther Kite, helped to pioneer the development of the Arizona Strip, and will continue to pursue their lifestyles, unless their goals are thwarted by the desires of a few environmentalists. It is my

desire to see the region controlled environmentally, as our entire planet should be, but not to protect any area to an extent tantamount to its being cloistered.

Finally, with such a small percentage of land in Arizona available for private use, the potential reduction of such access furthers the limitation of private and public income.

Please allow those desirous of pursuing their livelihood in the Arizona Strip to continue to do so by supporting Alternative 4 of the Draft Resources Management Plan for the Arizona Strip District. Please do not further restrict multiple-use, thereby reducing employment of our workers, which will certainly reduce the income our Governments so sorely need, and possibly add to our Welfare Department's burden.

Thank you for your consideration of my views. I am

Sincerely yours,

James L. "John" Hale, Jr.
Chino Valley Town Councilman
Forensic Document Analyst

JLH/cjh

05-04

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed a copy of the Resource Management Plan. There is little evidence that these regulations must be imposed on an area-wide basis to protect any resource. We could more properly address the needs of this area on a more specific selective site basis. I also feel that any developmental proposals were conspicuously lacking.

The collective impact of the proposed management prescriptions on multiple use of this district will be substantial. We cannot afford to make any mistakes. The resources in the Arizona Strip Region are inexpendable. They are obviously important to the financial well being of many residents in the surrounding communities.

By adapting alternative 4 from the RMP, I feel that these resources will continue to be available. Consider the needs of us who would be so seriously affected by approving either alternative 2 or 3.

Thank-you,

Chris Button
301 East 1050 South
Kanab, Utah 84741

05-05

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

A varity of people have a varity of needs. The region of the Arizona Strip is used in different ways by many different people. To tie up such an excess of land into wilderness only caters to the needs of one group of people.

Alternative 4 from the RMP draft would best meet the needs of many people. There needs to be less emphasis on recreation management, especially "primitive" recreation. We need to shift away from this type of single use management. This area needs to remain open to meet the needs of the many who use it, whether for recreational use, or for their livelihood. Our public lands need be geared towards multiple use.

When making the final decissions about this region, please consider alternative 4. It will meet the needs of all people.

Sincerely,

Doug Lawrence
186 E. 405 N #43
Kanab, Ut. 84741

05-06

May 4, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

Congress has charged the BLM with writing a Natural Resource Management Plan. This plan is extremely important to myself and to my family. It has an impact on my income.

We need to use and practice good management when it deals with multiple use of our public lands. In the past, the BLM has been responsive and thus, the more restriction and acres tied or locked up in remoteness would be detrimental to the people in this area. After comparing the four alternatives, one must think which is the best for the people of this area. I would support first alternative 1, and my second choice is alterntive 4.

Thank-you,

Rebecca Cap
P.O. Box 504
Kanab, UT 84741

V-135

05-07

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

I have reviewed the draft of the Resource Management Plan for the Arizona Strip. It seems that suddenly there is a big scare concerning preserving the natural beauty of this earth. This is a good thing because it has been abused in many ways with many adverse affects to us its inhabitants. However, there are limits to what we should do in the environmental area. We have wilderness areas, and to think that if we don't designate certain areas as such will lead to extinction is far from the truth. Many different elements lend to whether an area will be developed or remain remote.

I support Alternative 4 from the draft. To tie up 452,800 acres in additional wilderness is not going to benefit us in this area. We need the tax base and the cash flow that this area provides to use through its natural resources. Please consider the needs of us who depend on this area for our livelihood.

Sincerely,

Dennis Jones

05-08

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I find it necessary to take the time to write concerning my opinions on the changes that may occur in the Arizona Strip Region.

We depend on the resources on the Arizona Strip. There is limited private ground available to us in this area. This being the case, our private grounds become even more valuable to us. Your plan stated that 135 ranchers have permits to graze their cattle on the strip. These grazing permits can't just be replaced because somebody wants to lock the cattle out of the Strip.

The people in Northern Arizona and Southern Utah depend on this area for much of their financial security. We can't afford to lose the mineral and timber rights. Our area is already hard pressed for employment opportunies and growth.

I feel very strongly that tieing up 452,000 additional acres into wilderness would hurt the outlying communities greatly. We could continue to receive the benefits from this area if Alternative 4 were adopted. This land must be used by many. Please don't take it away just to meet the needs of a few.

Sincerely,

[signature]
P.O Box 1019
KANAB UTAH
84741

05-09

Kathrin Crofts
P.O. Box 509
Kanab, Utah 84741

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

At a time when unemployment is so high, it is important that we do all we can to find or create opportunities for increased employment. By tieing up more of our public lands into wilderness, we are decreasing our chances for growth and an improved economic base.

We need to examine all of the alternatives closely before making the final decision. We need to take into account the needs we will have in the future as well as our present needs. These resources need to remain open for exploration and development. The needs of the people in the surrounding communities should be of a serious concern. We are the ones that will be affected.

Our future depends on these resources. Alternatives 2 and 3 are excessive in there demands. Alternative 4 is my choice because we can continue to develop these resources and receive benefits now and in the future.

Sincerely,

[signature]

05-10

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to encourage the BLM to support Alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

BLM is doing a good job of managing the Arizona Strip District. Federal law does not require that BLM change its existing management practices, only that it must review them. The District certainly does not need to place more restrictions on multiple use.

"If it ain't broke, don't fix it!"

Sincerely,

Robert R Ripley
PO Box 981
Page AZ 86040

cc: U.S. Representative Bob Stump

V-137

05-11

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to encourage the BLM to support Alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

The areas in and around the Arizona Strip already has more land devoted to national parks, recreation areas, game preserves, wilderness areas, wilderness study areas, etc., than nearly any other areas in the country! A large portion of the Strip such as the 265,000 acres of wilderness is already off limits to multiple use. We need to increase, rather than decrease opportunities for economic development in the region. Imposing multiple restrictions on the use of the rather limited remaining public lands to promote backpacking or protect scenic vistas is inconsistent with the continued viability of our already isolated communities.

Sincerely,

Randall K. Smith
PUBLISHER
LAKE POWELL CHRONICLE

cc: U.S. Representative Bob Stump

05-12

8 May 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St George, Utah 84770

Dear Sir:

I would like to encourage you to support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

I support a wide range of use of the Arizona strip including, mining, recreational and grazing use. I feel the 4th Alternative will allow the best over all use of the public land and the most people will benefit under that alternative.

Please don't take any more of the publics land away from the majority of the public.

Very Truly Yours,

J. Dean Slavens
Past Mayor, City of Page, Arizona
P.O. Box 307
Page, Arizona 86040

05-13

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 East
St. George, Utah 84770

May 8, 1990

I am writing to encourage the BLM to support Alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

Communities in or near the District are relatively far from regional economic hubs. As a consequence, they must largely depend in local industry and the continuation of multiple use of BLM administered public land to sustain their economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin. Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation.

Sincerely,

Carla R. Corn

cc: U. S. Representative Bob Stump

05-14

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have been of the opinion that part of the BLM's responsibilities is to see that our public lands are not monopolized by any particular group of people. This means that they not only need to be intouch with the needs of the naturalists, but they need to be aware of the needs of those who use the land to provide for their living. To help meet the needs of all these people, the only solution is to let are public lands be used for a variety of things. Proper management is the key to success in this area.

Alternative 4 from the RMP draft would best meet the needs of many people. There needs to be less emphasis on recreation management, especially "primitive" recreation. We need to shift away from this type of single use management. This area needs to remain open to meet the needs of the many who use it, whether for recreational use, or for their livelihood. Our public lands need be geared towards multiple use.

When making the final decissions about this region, please consider alternative 4. It will meet the needs of all people.

Sincerely,

Roy Miller
845 So. Cedar Knolls
Cedar City, Utah 84720

V-139

05-15

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84741

Dear Mr. Curtis:

Living in Southern Utah and North Arizona is quite an experience. The communities are surrounded by a beautiful environment and clean air. I'm sure the people want it to reamin in this state. It is up to us to help protect it.

I feel that we should have a balance in all things. We are surrounded by national parks, recreation areas, game preserves, wilderness area, state parks and wilderness study areas. I feel that we have tied enough into wilderness. We need to now start looking into developing our natural resources. We need to practice and support our multiple use practices. We don't need additional lands locked up for "remoteness".

After studying the Arizona Strip District Resource Management Plan, I feel that Alternative 1 is in the best interest and alternative 4 is second best.

Sincerely,

Michael Dearden

Michael Dearden
36 N 300 W
Kanab, Ut 84741

05-16

April 30, 1990

Mr. Dennis Curtis
Bureau of Land Management[
Arizona Strip District
390 North 3050 East
St. Geroge, Utah 84770

Dear Mr. Curtis:

Federal law mandates that you must examine your management practices.

After reading the draft Resource Management Plan for the Arizona Strip District, I found there were 4 alternatives reviewed. The 1st alternative is to remain status quo. Most of us feel status quo is not good. The other alternatives offer locking up additional areas into designated wilderness.

Why not look at taking some of the 265,000 acres out of wilderness? I failed to even see such a proposal. Why must we continue down the path of designating additional lands into wilderness. I would like to see 65,000 acres released from the present wilderness designated area. If you are truly examining your management practices, then you should take a look at the total package. Lets review the whole area and submit a proposal to delete some of the acres that are now locked up into wilderness. 1

I don't feel you are short sited, but I feel you intentionally forgot to examine the whole picture. Don't tie up any additional lands.

Sincerely,

Ron L Gardner

1. See comment response 05-46-01.

05-17

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Dennis:

The availablity of private land is limited because of the great amount of federally and Indian owned lands in our area. These federal and Indian lands are essentially closed to commercial development. Because of this, we have become dependant on the use of some of these lands to support us in this area.

Our public lands need to be made available to meet the needs of many. We need to ensure the our cattle will continue to have land to graze on, and that the natural resources remain available to provide economically for many. Our existence in this area is dependent upon these conditions.

After reviewing the RMP for the Arizona Strip I support Alternative 4. We must not lose access to these important resources.

Thank you,

Jean Jarvis
P.O. Box 3
Orderville, UT 84758

V-141

05-18

April 30, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

In order to achieve a balance in land usage on the Arizona Strip, I feel that the adoption of Alternative 4 from the Resource Management draft is essential.

Maintaining a proper balance in all things seems to be an impossible goal. Multiple Use management needs to have greater consideration in the management and planning of the Strip. Multiple use does no mean every use on every acre. It means a broad range of uses are managed for and approved. It certainly does not mean "remoteness" and "naturalness" need have such heavy consideration across the entire area.

All areas of usage must be considered. Not just the useage for Recreational resources. The Natural Resources available to us need to be equally considered.

Sincerely,

Raymond Heaton
alton utah

05-19

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am troubled by the RMP's understating of the collective impact of multiple designations on multiple use. This is particulary true throughout the "Guideline Area B". These designations are not specifically identified thus making it difficult to evaluate their impact.

These restrictions impose substantial costs for public land users and potential public land users. They eliminate opportunities to take maximum advantage of the resources of the District. Chapter IV of the RMP examines impacts only in the context of a single resource.

Because I feel that the collective impacts of such regulations is not identified or is dramatically understated throughout the RMP I cannot support alternatives 2 or 3. I am in support of alternative 4.

Thank you,

James Dee Willis
271 No Main
Kanab, Ut
84741

05-20

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am aware that you are examining the Arizona Strip Region to determine if some changes are needed. Although I am not fully aware of all aspects of the Resource Management Plan draft, I am concerned that your desires lean towards setting aside more land for recreational use, and more specifically towards the wilderness type of recreation.

Recreation is great. I think we need to all get out and enjoy the beauties of this earth and just relax and get away from it all, but the hard reality is that we need this area to provide for the economical needs of the people in our communities. Recreation and economical use can exist together. Proper management is the key to this success.

Alternative 4 will help lead us in this direction. Please consider all our needs when these decisions are made.

Thank you,

Kenneth Worthen 373 East 300 North #56-16 Kanab Utah

05-21

Darlo L. Esplin
33 North 500 East
St. George, Utah 84770
May 1, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

The Resource Management Plan draft for the Arizona Strip causes me great concern. If Alternatives 2 or 3 are adopted, we could be severly affected by these changes.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,
Darlo L. Esplin
Darlo L. Esplin

V-143

05-22

May 2, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
ST. George, UT 84770

~~Mr. Dennis~~ M. Curtis

After studying the Arizona Strip District Resource Management Plans, I strongly support Alternative 4.

We are surrounded by wilderness. It seems that we are always trying to protect our rights to multiple use of our federal lands. We are either locked up by wilderness designation, or by the ACEC's area. We need to increase opportunities for economic development, not continue to lock lands up from further development. We do not need additional restrictions.

At this point in time, I feel that the BLM has done a fairly good job of managing the Arizona Strip Area. If a change has to be made for change sake, then decrease the amount of land that has to be designated wilderness.

Sincerely,

Allan Esplin
496 E. 650 So.
St. Geo. Ut.
84770

05-23

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It is vitally important for me to make comment on the Arizona Strip District Resource Management Plan.

I have toured the area arount the "Arizona Strip" and found that multiple use can and does exist harmoniously. I have toured the area where reclamation has been completed on the uranium site locations. Energy Fuels should be commended for the fine job of repiacing the land to its primitive state.

I do not wish to see additional regulations from BLM. Remoteness will exist because of its location, lack of population, and lack of roads which are either paved or have easy access.

I feel that Alternative 1 or 4 are in the best interest of everyone concerned.

Sincerely,

William H Gaddy
41 W 300 S
Kanab Utah
84741

05-24

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It seems that we are continuously receiving more government regulation. It came as no surprise to me that the BLM desires to place more regulations on the use of our public lands.

The residents in this area depend heavily on what little public land is available for multiple use. In our area much of this public land is either within an Indian reservation, or designated for some form of restrictive management by BLM, the Forest Service, or the National Park Service.

We can't afford to lose more of our public lands because of the restrictions that would be placed upon it if alternatives 2 or 3 were adopted from the Resource Management Plan draft of the Arizona Strip Region. Because the results of such changes would have an adverse affect on those in this area, I would advise that the BLM adopt Alternative 4.

Sincerely,

D. Scott Jarvis
587 S. 175 E.
Kanab, Ut. 84741

05-25

May 7, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I appreciate the opportunity to comment on the BLM Draft of the Resource Management Plan on the Arizona Strip District.

I do not feel that enough emphasis has been placed upon multiple use. I do not feel that every acre should be multiple use, but that with proper management, a better alternative would be in the best interest of the land, the cattlemen, the natural resource people, and the timber people. We need to emphasis multiple use and let remoteness exist because of its location. I do not think we need additional restrictions, but feel that the present BLM leadership will continue to do a good job managing the District.

Let's keep the attitude that we must have a balanac of all things. Thus, don't tie the hands of BLM staff by giving them additional restrictions to try to enforce. All of us care about our environment, and it must remain a team effort.

I support alternative 4.

Sincerely,

RaeLene Johnson
209 East Center #65
Kanab, Ut 84741

V-145

05-26

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

Dear Mr. Curtis:

I don't agree with the preferred alternative listed in the Resource Management Plan for the Arizona Strip Region. This area can be used by many different people for many different purposes. To think that we can't share this land and make it available to several people seems shortsighted to me.

Within the immediate region, literally millions of acres have already been restricted in one way or another from competing uses to promote backcountry recreation. I don't feel that anyone has the authority to make a decision as serious as this that could cause so much hardship to the people in the outlying communities.

This region needs to be kept available for multiple use. We don't need to restrict it from all other resources just to have land available for backpacking. Effective management is the solution to this situation, not tieing up more of our public land for this one purpose useage. I support alternative 4.

Sincerely,

05-27

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I realize that it is necessary for the BLM to reexamine the Arizona Strip District in accordance with federal regulation. This is definatly not an easy task, and it is impossible to make a "perfect" evaluation. No two people would approach this task from the same angle.

I feel that there are many things that have not been taken into account when the draft of the Resource Management Plan for the Arizona Strip was created. Much of this area has been lumped together. You need to specifically analyze each site. More analysis is necessary before the these decisions can be made.

I don't feel that the additional regulations that are called for are necessary. Their impact would affect an entire area, and would categorically eliminate or impede other public uses. This is not efficient use of our resources or good public land management policy. Indeed, elimination of categories of uses on an area-wide basis without regard for the compatibility of a specific proposed use and the protected resource, does not fulfill BLM's obligation to manage for multiple use.

Alternative 4 would be the best method for management of this area.

Thank you,

Daniel A. Bartlett
Councilman Kanab City
Kanab, Utah

05-28

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

We are surrounded by either state or federal lands. We are restricted by our activity on this land. We have limited private land and an abundance of federal restrictions imposed throughout the region. The more restrictions, the more difficult it becomes for us to survive economically. We need to allow the BLM to continue to have the flexibility to manage the Arizona Strip District.

According to the draft of the Resource Management Plan on the Arizona Strip, much of the land proposed for additional restrictive management are the same lands which were recently studied and released from wilderness designation. Congress decided that these lands should be returned to multiple use and yet now these same acres are being considered for restrictive management. It is strange that just a few years ago this same process took place.

I feel that alternative 4 is the best choice.

Sincerely,

Brent Alvey

P.O Box 502
Kanab, Utah 84741

05-29

May 5, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The impact that locking away 452,800 acres inaddition to the already 9% of the Arizona Strip that is already desiganted as wilderness could be more than this community can bear.

This area is needed for it grazing rights. Cattlemen depend on this location for their livelihood. Several people have transfered into our area just for the employment that opening up this area to mineral useage has provided. We cannot afford to lose all of this! The people of Southern Utah and Northern Arizona depend on it for their economical stability.

Of the alternatives available in the RMP draft, I support alternative 4.

Thank you,

Ron Hunting Inc 379 E 400 S Kanab UT 84741

V-147

05-30

May 6, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona Strip seems very onesided in its apparent desire to designate addition acres into wilderness.

I am against alternatives 2 and 3. We can't afford to lose this much additional land to wilderness. I do support alternative 4 as long as every effort is made to see that access remains to the resources this region holds.

Please consider my view when this issue is settled.

Thank you,

Hazel Moore
Kanab, Utah
84741
#56

May 1, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

The Resource Management Plan draft for the Arizona Strip causes me great concern. If Alternatives 2 or 3 are adopted, we could be severly affected by these changes.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Don Esplin
262 S. 600 E
St George, Utah

April 27, 1990

Dennis Curtis
Arizona Strip District BLM
390 North 3050 East
St. George, UT 84770

Mr. Curtis:

Thank you for the chance to voice my opinion concerning the draft RMP for the Arizona Strip.

The Arizona Strip is surrounded by many natural wonders and scenic beauties. The people in the Southern Utah/Northern Arizona area are constantly hearing that wilderness areas would create new jobs and bring revenues into the area.

The Arizona Strip has over 265,000 acres of designated wilderness and about all people realize is that they are being excluded from the land they depend on for their livelihoods.

The only new revenue comes from the land. Natural resource commodities are the foundation of all other businesses. Please select our alternative which promotes more emphasis on wise use and one which would leave you, the land managers, with freedom to do the right things rather than merely let nature take its course.

If one of your listed alternatives must be selected, please implement alternative 4.

Sincerely,

Eldon E. Hafen
368 So. 600 E.
St. George, Utah
84770

05-33

May 4, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am worried about your apparent desire to add more acreage to the already excessive land already so designated. To turn productive land into wilderness is not always the best thing for that land or its inhabitants.

The Resource Management Plan draft seems to overempasize the need for more wilderness area. With such an emphasis on remoteness, wildlife may suffer. The Arizona Strip provides only limited habitat without water and range improvements. Without developed tanks and guzzlers, few animals could survive the harsh conditions. Roads and trails need to be maintained and perhaps at times opened to allow access for management activities.

We need to keep these lands open for the good of all. I feel that adapting alternative 4 is the way for us to receive the best overall use of the Arizona Strip District.

Thank-you, Verl Sawyer

BOX 28
Orderville Utah 84758

V-149

05-34

Five County Association of Governments

SOUTHWEST UTAH

906 North 1400 West
St. George, Utah 84770

FAX (801) 673-3540

Post Office Box 1550
St. George, Utah 84771

(801) 673-3548

May 7, 1990

Mr. Dennis Curtis, Team Leader
Arizona Strip RMP
390 North 3050 East
St. George, Utah 84770

Dear Dennis:

The staff of the Five County Association of Governments has reviewed the Draft Arizona Strip EIS/RMP. We feel that your staff has made a good effort in identifying concerns for the future of the area.

It is evident that the most direct affects of the RMP/EIS will be to communities outside of our jurisdiction such as Page and Colorado City, Arizona. Our jurisdiction will be most affected by indirect results of land management decisions.

An analysis of the proposed alternatives shows that these indirect affects will be minimal except for the statement on page S-5 which states that "Roads not needed for resource management or which contribute to resource damage will be closed". We would hope that local officials and affected landowners are consulted prior to any such closure. A unilateral closure without such consultation would be poor judgement.

The broader issue of the designation of special management areas is a more difficult one. We agree that specific resource values must be addressed, but the setting aside of 445,210 acres in such special management areas may be excessive.

In order to allow local communities to have the greatest latitude in future development possibilities, we would favor the adoption of Alternative 4.

Thank you for the opportunity to comment.

Sincerely,

Kenneth L. Sizemore, Director
Community and Economic Development

KLS:dl

05-35

May 4, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

I have reviewed the Resource Management Plan draft for the Arizona Strip. I support alternative 4 as the best one to adopt to meet the needs of the people in this area.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of insuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It is not necessary to tie up an excessive amount of acerage into wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is any shortage of "remoteness" on the Arizona Strip.

Sincerely,

Esra Lee Johnson

05-36

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

I have reviewed the draft of the Resource Management Plan for the Arizona Strip and I am in support of Alternative 4; however, I feel some changes could be made to better manage recreational uses of this area in exception of Wilderness areas and Developed Campgrounds.

1. We should manage for extensive recreation in the Mount Trumbull area with no further designations or restrictions.

2. Alternative 4 designates only "A" areas for extensive recreation. No "B" areas would be designated.

3. We should confine Visual Resource Management to the Virgin River Gorge and Wilderness Areas.

4. Altenative 4 should be changed for Off Highway Vehicle management

I hope you will consider these ideas when the final decisions are made concerning future useage of the Arizona Strip District.

Thank you,

LaDell Abney
Bx 356
Kanab Utah
84741

May 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

As a resident of Southern Utah, my greatest concern after reviewing the Resource Management Plan for the Arizona Strip is that some important employment opportunities could be taken away from us. This concerns me because finding good, steady employment in our area is a monumental task. It is obvious that our area needs to take steps to provide employment opportunities for its residents.

Removing these lands from any constructive use adds greater limitations to those that aready exist. I am concerned that if this area doesn't remain open for future use and development, my family may have to relocate.

I am definitely against Alternatives 2 & 3 because tieing up 452,800 acres into wilderness could be very costly to us, the local citizens. I support alternative 4. Keeping this region open for commercial use is the only logical alternative.

Sincerely,

Karen Alvey
Box 356
Kanab, Utah
84741

V-151

May 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
ARizona Strip District
390 N. 3050 E.
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed a copy of the Resource Management Plan draft for the Arizona Strip. I am concerned that the BLM has gone overboard in its desire to protect this area.

Areas of Critical Environmental Concern designations should be limited to the smallest area necesary to protect a resource. The RMP has not done that. The BLM should reevaluate the proposed ACECs to determine whether restrictions on the entire areas proposed are necessary.

As the Alternatives stand, I support alternative 4, however a review of this matter is in order.

Sincerly,

Carol L. Nessen
444 N 200 E
Kanab, Ut 84741

May 3, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It seems that the government only listens to small number of people when they make the many important decisions that need to be made. Maybe it because the majority don't take the time to voice their concerns and opinions. Apathy is a great problem in our society today.

To tie up so many additional acres into wilderness is not going to meet the needs of the majority. Not only do these lands provide for recreational use, but they also provide an economic base for many people. This area is hard pressed for good year around employment. Tourism is good for some, but it can't provide for all. To take the opportunity away for the people in Northern Arizona and Southern Utah to expand and grow would cause a great economical strain.

I support Alternative 4 of the Resource Management Plan for the Arizona Strip Region. I hope you'll take my views into consideration when this decision is made.

Sincerely,

391 North Vermillion Cir
KANAB

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have reviewed a copy of the Resource Management Plan for the Arizona Strip. The BLM currently possesses authority to carryout or halt any proposed action. When dealing with threatened or endangered species, all federal agencies must protect them, thus ACEC's are not needed.

I am in support of alternative 4 of the RMP, however, the endangered species act already mandates actions which may affect an endangered species. Because of this, some changes in this alternative may be in order.

Sincerely,

Box 37
Orderville, Utah,
84758

:he area that are still open to mu
der picture of a region which is l
ıltiple use. There is no shortage
/ when looking for a wilderness e:

ternative 4. It seems to be best
ıe many who use this area.

May 3, 1990

Sincerely

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Clarence

Dear Mr. Curtis:

RMP/EIS

I think that the only way we will ever have wilderness is to designate it as such seems silly to me. Millions of acres have already been restricted in one way or another from competing uses to promote backcountry recreation. Natural conditions, land ownership, existing federal regulation and the lack of demand for any commercial development ensure that the basic character of the entire Arizona Strip region is, and throughout the 15-year planning cycle will remain, "remote".

The Resource Management Plan focuses narrowly on the only public lands in the area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Sincerely

Clarence Spencer

Box 78
Glendale, Ut. 84729

May 1, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of the values that BLM seeks to protect are already directly protected by federal wildlife, cultural resources or surface management laws. Why inflict us with more restrictions, and regulations? This District needs to be left upon to several uses, not just limited to one. We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Julia Vonin

05-43

May 5, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Mr. Curtis

I have reviewed a copy of the Resource Management Plan draft for the Arizona Strip. I think that it fails to give adequate attention to the mineral potential of the District. It states that the hard rock mineral potential of the District is high, and that earnings from employment in the local mining industry is higher than any other source of employment, It further states that reclamation of mines in this District has been successfull. However, the BLM fails to maximize the opportunity of the public to explore for and develop the District's significant mineral resources.

Why would the BLM want to tie up such a huge amount of this region and its resources by designating it as wilderness? We have seen good results out on the strip, don't they count for something?

I could support alternative 4 from this draft if it were adopted; however, we need to be certain that these resources are not tied up, and remain available for exploration and future development.

Thank you

Kendra Wells
3475 300E #91
Kanab, Utah 84741



05-44

ORCA
Outdoor Recreation Coalition of America

4620 Alvarado Canyon Rd.
San Diego, CA 92120

Board of Directors

Amber Brockman
Brookwood Companies

Mike Burns
Backwoods

William (Bill) E. Perry
EMS

Deeke Priest
REI

Al Quarter
Summit Sports Co.

Bill Ross
Wild Country

Bea Rumpke
DuPont

Sally McCoy
The North Face

Bonnie Self
Adventure 16

Vincent Stanley
Patagonia

Lee Whittaker
Rainier Mountaineering, Inc.

Skip Yowell
JanSport

May 1, 1990

Dennis Curtis
BLM
Arizona Strip District
390 North 350 East
St. George, UT 84770

RE: Arizona Strip District Resource Management Plan
FROM: Outdoor Recreation Coalition of America

ORCA (Outdoor Recreation Coalition of America) has a number of comments on the Arizona Strip District Management Plan. These comments reflect the view of the ORCA membership. ORCA is a trade organization that represents outdoor companies having sales well in excess of a billion dollars. I have enclosed an ORCA brochure for you. If you would like more information about ORCA please contact me. ORCA comments are as follows:

1. The overall plan does not adequately provide for non-motorized recreational activities.

2. The Parashant Canyon area should receive the ACEC classification.

3. Both the Lake Mead recreation area and the Grand Canyon recreation area, which border the Parashant Canyon area, are managed in a way that is consistent with the ACEC. In addition, Parashant Canyon and the surrounding area represent truly outstanding, scenic and environmentally sensitive areas.

4. The quietness is one of the significant benefits of this region. Base line noise levels need to be established throughout the Strip.

5. Signage on Arizona strip roads is inadequate and at times completely misleading. Adequate signage and removal of misleading signage should be part of the plan.

6. The recreation data is inaccurate in some cases. In particular the non-motorized visitation for Kanab Canyon is off by a factor of at least 10. NOLS (National Outdoor Leadership School) accounts for 1/2 the visits for the year and all of the visitor hours. Using data from the mining company as your source for | 1

1. The recreation data presented in the RMP is based on BLM in-house sources. NOLS activities as a permitted operation have been a recent occurrence and at the time Table III-24 was developed, these were accurate figures for the Kanab Creek area. NOLS use of this area has increased since that time. Assistance from ORCA members as volunteers would be welcomed by the BLM.

05-44 (continued)

visits clearly is inadequate. In the future, ORCA could help you establish a better data base through our members (which include a number of retail stores in CO, WY, UT and NM).

7. Recreational use of the Lower Paria is being significantly limited. The quality of the recreational experience is being destroyed by grazing. We hear numerous complaints from outdoor enthusiasts about grazing in the Lower Paria.

8. The Ferry Swale Airport is not needed and would cause significant environmental damage to the surrounding areas; in particular, the Colorado River upriver from Lee's Ferry and the Paria Canyon.

9. We are against any road closures where those roads lead to trailheads or routes. An example of the kind of closure that gives us concern is at the top of Rider Canyon. There is a hiking route into Rider that will get more use in the future. Roads leading to this route should not be closed.

10. Overall, we support alternative #3 rather than alternative #2 with the exception of the area bordering Marble Canyon. In the Marble Canyon area, Alternative #2 would be preferred. The solitude, remoteness, and beauty of the Arizona Strip area are unique. Alternative #2 does not adequately protect these characteristics for future generations.

Please include me on any further mailings. We would be interested in assisting you in the future.

Al Gunter
Vice President, ORCA
c/o Summit Sports
P.O. Box 3516
Boulder, CO 80307



Scott Goulding
Orderville City Mayor
Orderville, UT 84758

May 1, 1990

Dennis Curtis
Arizona Strip District BLM
350 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Please accept this letter on behalf of the people of Orderville, UT. Many doubts surface after reviewing the draft RMP for the Arizona Strip.

The preferred alternative is often confusing and misleading. In one place it states that pondersoa pine would not be harvested under this alternative and that economic benefits would be forgone, yet elsewhere in the alternative it eludes to the idea that some timber management (with harvests) could take place. This contridiction and the heavy emphasis on remoteness are alarming. 1

Many people from our area rely on the resources of the Arizona Strip. We support sound management practices such as livestock grazing, mineral development, recreation, watershed protection and other legitimate uses of the public lands. We do not support wilderness or proposals which exclude us from the land.

More and more the local area is subjected to the effects of preservation. There is a constant battle with wilderness proponents. We were once led to believe that wilderness would be an environmental investment and an economic plus. Now the evidence points just the opposite direction. Wilderness areas become breeding grounds for insect and deseases and the effects on our economy have been negative.

We need a change of pace. The final RMP should be more oriented at providing direction to improve and enhance rather than "preserve" or lock up.

The Arizona Strip is remote without being declared or managed for it. There is a need to have access to the area rather than planning to furhter promote problems for wise land

05-45

1. The explanation of the planned forest management program has been rewritten for clarification. See text change on page II-20 and Appendix 30.

05-45 (continued)

management. Access to the resource is the key to doing the right job.

One of your district wide objectives is to "balance use and conservation of renewable resources to provide sustained productivity" (emphasis added). To meet objectives such as this requires active "hands on" monitoring, evaluation, and action.

My understanding is that the BLM currently has the ability to do what needs to be done or to "protect" special status species or areas. The draft RMP tightens your ability to function effectively. Government agencies do not need more regulations to adhere to, rather they need to be able to get out of the office and make positive things happen to the resources.

When selecting an alternative to implement in the final RMP, please select one which considers the needs of the people directly involved and dependant on the natural resources and one which gives flexibility to you as resource managers. The most appropraite choice may be alternative 4 or 1 (prioritized).

Sincerely,

Scott Goulding
Orderville City Mayor



05-46

April 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

Federal law mandates that you must examine your management practices. After reading the draft Resource Management Plan for the Arizona Strip District there are 4 alternatives reviewed. The 1st alternative is to remain status quo. Most of us feel status quo is not good. The other alternatives offer lockingup additional areas into designated wilderness. Why not look at taking some of the 265,000 acres out of wilderness? I failed to even see such a proposal. Why must we continue down the path of designating additional lands into wilderness. I would like to see 65,000 acres released from the present wilderness designated area. If you are truly examining your management practices then you should take a look at the total package. Lets review the whole area and submit a proposal to delete some of the acres that are not locked up into wilderness. I don't feel you are short sited but I feel you intentionally forget to examine the total picture. Don't tie up any additional lands. Alternative 1 is the next best policy if we can't remove the 65,000 acres out of wilderness. 1

Sincerely

William D. Spencer

1. The wilderness designated on the Arizona Strip was based on the requirements of the Federal Land Policy and Management Act (FLPMA), a federal law which mandated the BLM to inventory the public lands and identify for the U.S. Congress, those lands which meet the criteria for inclusion into the National Wilderness Preservation System. The Arizona Strip did this and Congress designated the lands which now make up the wilderness areas on the Arizona Strip with the Arizona Wilderness Act of 1984, Public Law 98-406.

   The BLM has no legal authority to rescind congressional designations.



May 1, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Mr. Curtis:

What does mining, ranching, and other multiple use of lands mean to you? It means a way to support my family. It means a way of providing a better way of life for the people of this area. It means a better educational program, and it means a healthier society.

This draft of the Arizona Strip District Resource Management Plan can impact that way of life for my family if Alternatives 2 or 3 are adopted. We need to be concerned with the amount of acres locked up in wilderness. We certainly do not want to adopt a policy that would cause great grief to the majority.

I totally support alternative 4.

Sincerely,

Donald C. Olsen
P.O. Box 122
Fredonia AZ 86022

May 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am employed by Energy Fuels, a mining company that operates several uranium mines in the Arizona Strip District. I have the following comments on the draft Resource Management Plan for the Arizona Strip District.

First, I believe that Energy Fuels' track record at the Hack Canyon mines demonstrates that mineral resources can be developed in the District with minimal disturbance of the environment and with significant economic benefits to the local communities. The company and its employees are committed to exploration and development in a manner that has been clearly shown to have only limited, short term impacts. BLM does not need to impose area-wide restrictions on mineral development to ensure that it is done properly. I recommend that you adopt Alternative 1, or at the very most, Alternative 4.

BLM is doing a good job managing the District. Federal law does not require that BLM change its existing management practices, only that it must review them. The District certainly does not need to place more restrictions on multiple use. If it's not broken, don't fix it!

Second, the RMP underemphasizes the importance of economic development, particularly mineral development, and overemphasizes additional restrictions to promote "remote" recreational experiences. As a local resident it is obvious that additional restrictions are not necessary to promote recreation. We are literally surrounded by national parks, recreation areas, wilderness areas, Indian reservations, game preserves and other federal lands upon which development may not occur. BLM should show a greater appreciation for the value of managing the remaining federal lands under its jurisdiction for multiple use.

Development on the Strip is limited by various natural characteristics of the area (rugged terrain, deep canyons, lack of water, etc.). There is no basis to suggest that the basic "remoteness" of the area is presently threatened in any respect.

Finally, BLM should not use the land use planning process to accomplish what Congress was unwilling to do in 1984. The wilderness study areas that were returned to multiple use under the Arizona Wilderness Act should not now be managed principally to protect their "remoteness". That is, for all practical purposes, the same as making them wilderness areas. The breccia pipe deposits in the District are a unique resource of national significance. BLM should do its part to see that such resources are properly developed. It should clarify that the RMP is not intended to preclude mineral development, except in areas that are specifically proposed for withdrawals.

Sincerely,

James R. Andrus
514 N. 200 E #46
Kanab, Utah 84741

WILLIAM D. LAWRENCE, M.D.
ROBERT E. JONES, M.D.
CHARLES VAN EPPS, M.D.

AFFILIATED GYNECOLOGISTS, LTD.

1010 EAST McDOWELL ROAD•SUITE 300•PHOENIX, ARIZONA 85006
TELEPHONE 254-5843

April 30, 1990

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 Eaat
St. George, Utah 84770

Dear Mr. Curtis:

I have read the report prepared by your team, I have talked to many people that are involved, and have reviewed in my own mind what is important for the good of the American people in relation to Northern Arizona.

In many ways, I am an environmentalist and have hiked Paria Canyon in October of 1988, and found it a most exhilarating experience.

I am a pilot and a phyaician who fliea into Page frequently aa a consultant for the community hospital there. I feel for the good of the area that it is imperative that a new airport be put at Page that will accommodate larger planes and it seems as though Ferry Swale northwest of the highway and a few milea north of Page ia the ideal place to put that airport. As I think back to my hike through Paria Canyon, it is hard to imagine that the airport in that location would have taken any of the enjoyment out of my trip. I waa in the Glen Canyon country long before the dam was built and have apent many hours on Lake Powell since it has been built. There is no question that the American people have benefited recreationally besidea economically and in other ways from the conatruction of that Lake. As the American populace ages, there is no question that there will be many people that will not be able to visit that Lake and see the beautiful Rainbow Bridge if they have to ride from 140 to 300 miles on a bus. Many of them could visit that area if they could jet into that new airport.

Pleaae consider these thoughts as you make recommendations to the Bureau of Land Management and to the Page City Council. Thanking you in advance for your consideration.

Yours very truly,

William D. Lawrence, M.D.

WDL/mb



April 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

Federal law mandates that you must examine your management practices. After reading the draft Resource Management Plan for the Arizona Strip District there are 4 alternatives reviewed. The 1st alternative is to remain status quo. Most of us feel status quo is not good. The other alternatives offer lockingup additional areas into designated wilderness. Why not look at taking some of the 265,000 acres out of wilderness? I failed to even see such a proposal. Why must we continue down the path of designating additional lands into wilderness. I would like to see 65,000 acres released from the present wilderness designated area. If you are truly examining your management practices then you should take a look at the total package. Lets review the whole area and submit a proposal to delete some of the acres that are not locked up into wilderness. I don't feel you are short sited but I feel you intentionally forget to examine the total picture. Don't tie up any additional lands. Alternative 1 is the next best policy if we can't remove the 65,000 acres out of wilderness. 1

Sincerely

Ted Goulding

POBOX 65
Orderville, Utah
84758

05-50

1. See comment response 05-46-01.

Jason Hoyt
5594 N Mnsvl.Rd.
Cedar City, UT 84720

April 30, 1990

Dennis Curtis
Arizona Strip District BLM
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I appreciate the opportunity to respond to the BLM draft Resource Management Plan for the Arizona Strip.

The Strip is and has been a tract of land vital to the overall well being of the small communities along the Utah/Arizona border. The land is remote by any standard, but the plan emphasizes this component far to much. There are several wilderness areas, parks and other limited use areas within the Strip and in close proximity which all lend to the vast, and growing, number of acres excluded from active management.

The Arizona Strip would not be the place it is without the improvements and developments that have occurred in the past. Livestock producers pioneered the area and developed water and made fences to control use of grazing. Without this water development the land would be very much a desert with very few kinds of large game animals dispersed throughout the area.

In selecting a final alternative, please keep in mind that range developments need to be maintained to be useful. Don't lock areas away from management activities.

The BLM currently has the authority to control what happens on the land and you need only to review, not change, current direction.

Thank You,

Jason Hoyt

Jason Hoyt

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Ms D Dawn Williams
Quail Park Lodge
Kanab, UT. 84741

05-53

111 Kletha Trail
Flagstaff, AZ 86001

April 27, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. I believe that the draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of Alternative 1.

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Bill Casadevall

Bill Casadevall

V-165

05-54

April 27, 1990

Dennis Curtis
Arizona Strip District BLM
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis,

In regards to the draft Resource Management Plan for the Arizona Strip District I would like to express a few concerns.

First, I am alarmed by the over emphasis on "remoteness" and recreation on the primitive end of the ROS. The plans to protect the remote character of the strip under alternative 2 are strongly skewed toward preservation rather than suggesting a plan for wise use and conservation. This trend in the plan leads you, as the land manager, further away from multiple use concepts. We need less not more restrictions.

Second, there should be some emphasis placed on long term land users, and on providing incentives to keep them involved as tools for management. This idea was mentioned in the district wide objectives, but received little attention thereafter.

People who live and depend on the land care for its well being. They are not out to destroy, but enhance where possible. There is very little encouragement in the plan for those whose lives have been devoted to use and care of the Strip. It would be well to remember them in the final RMP.

Third, there was very little mention of the forest resources of the Strip. I realize this must not have surfaced as an issue during the initial scoping, but there is a potential for management and enhancement of the forests within the area.

Forests are not only nice places for recreation, but they also provide useful commodities for people. Wise, sound timber management could enhance the Strip forests and make them more productive. Recreation opportunities could be improved and a long list of benefits derived from forest products.

In summary, it seems obvious that the least restrictive alternative (i.e. #4) should be selected. An RMP should provide direction and establish some management goals. It should not limit or restrict wise use and conservation. The BLM currently has the authority to accept or reject any proposed action. Establish goals, but do not lock us out!!!

Sincerely,

Carlene P. Morris

Carlene P. Morris

May 4, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, Utah 84770

Dear Mr. Curtis:

The Arizona Strip has many resources for all. If alternatives 2 or 3 are adapted, many of these resources would be locked up. These measures are overdone. These alternatives will place forested areas into Resource Conservation Areas, further limiting and excluding future management of these sources of timber.

We in this area must not allow either of the alternatives to pass. Our area is hard-pressed for employment. The loss of these resources could be devistating.

By adapting alternative 4, we can keep these resources open and available now and in the future. Please consider our needs when this important decision is made.

Thank-you,

Sincerely,
Joseph Carusso

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan draft for the Arizona Strip. I see that we could be faced with more limiting regulations. The BLM already has mandates and authority to do or not do various projects on public lands under their jurisidiction. More resrictions would merely hinder progress.

Governmental regulation is continually making it harder and harder to earn an honest living. Additional restrictions could cause many to be seriously affected. Many depend on the resources of the Arizona Strip for their livelihood. If you tie these up, then many will lose their jobs. Unemployment is already high, additional regulation will only add to this problem.

Sound range and resource management takes and active hand, not passive attitudes. I feel that selecting alternative 4 will leave options open to us on the Arizona Strip. Keep this area open to future development.

Thank you,

Gloria Hamblin

ARA Leisure Services

Wahweap Lodge & Marina
P.O. Box 1597
Page, Arizona 86040
(602) 645-2433
FAX: (602) 645-5175

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to encourage you to support alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

I urge you not to place additional restrictions on the land use for the Arizona Strip. I have been living on the Arizona Strip since 1943. I support mining, grazing and recreational use of this land. The plan should encourage multiple use.

When the Paria Wilderness Bill was created it was agreed by all involved that the areas that should be wilderness were designated. Alternatives 2 and 3 are putting the same study area back under restrictive use circumventing the agreement from 1984.

Please don't allow this to happen.

Sincerely,

Betty Jo Roundtree

Betty Jo Roundtree
General Manager

BJR/ph

V-167

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

I have studied the Resource Management Plan draft and have determined that the best Alternative to adopt at this time is #4. This Region provides many valuable resources to us. Many cattlemen are dependant on it for grazing. Mining rights and recreational uses are other necessary and enjoyable uses of this land. You can't just "replace" an asset as great as this. We can't satisfy the desires of a few people at the expense of a great number of individuals.

The decisions that are made concerning the Arizona Strip will have a critical effect on all of us in this area who depend so much on the resources of this area for our livelihood. The timber and mineral resources have provided a great strength to our communities, and could continue to sustain several people for a great number of years.

Lets not lock this all up just to please such a small number of people. Adopt alternative 4!

Sincerely,

Greg Honey

Greg Honey
P.O. Box 82
Fredonia AZ

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Christine Cox
P. O. Box 576
Colo. City, Az
86021

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

The Arizona Strip has provided for the needs of many that it is crucial we not take the importance of this area lightly. We must carefully examine the impact of the different alternatives from the RMP drat. They could cause serious problems to the people of Northern Arizona and Southern Utah now and in the future.

Alternatives 2 & 3 draw so much of this area away from us and ties it up in "wilderness" that it essentially becomes no good to those who rely so heavily on it for their livelihood. Tieing up this much more of our public lands would be such a shame. So much of this land is already tied up in wilderness, and it seems as though we can't satisfy the needs of these selfish few who seem to always want more wilderness.

This land, with its great resources, was created to provide for us. Of course, that doesn't mean that we should be foolish in the ways that we develop these resources. We should be given the opportunity to manage the forests on the strip to show what a well managed forest provides.

It is important that this land be a land of "multiple use". Lets learn to share and get along. Alternative 4 could provide us with this opportunity.

Thank you,

Lael Atkinson
Kanab, Utah

May 3, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

The Arizona Strip has provided so much to so many that it is critical the we all carefully examine the impact of the several Alternatives stated in the Resource Management Plan draft for the future use of this area.

Alternatives 2 & 3 draw so much of this area away from us and ties it up in "wilderness" that it essentially becomes no good to those who rely so heavily on it for their livelihood. Tieing up this much more of our public lands would be such a shame. So much of this land is already tied up in wilderness, and it seems as though we can't satisfy the needs of these selfish few who seem to always want more wilderness.

This land, with its great resources, was created to provide for us. Of course, that doesn't mean that we should be foolish in the ways that we develop these resources. We should be given the opportunity to manage the forests on the strip to show what a well managed forest provides.

It is important that this land be a land of "multiple use". Lets learn to share and get along. Alternative 4 could provide us with this opportunity.

Thank you,

Kurt Bruckhoff





P. O. BOX 957, PAGE, AZ 86040

PHONE: (602) 645-9373

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip Divison
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed, with great interest and concern, the Arizona Strip District Resource Management Plan and Environmental Impact Statement Draft.

It seems apparent that your objective is to attempt to fix something that doesn't need fixing. Placing more restrictions on multiple use will continue to restrict the economic delevopment of the City of Page, its residents and surrounding communities.

Our economy relies very heavily on the tourist industry. To further expand this industry, the City of Page must build an airport capable of accomodating any aircraft flying today. And, alternate sites are restricted by the governing agency, the Navajo Nation.

How an agency of the federal government can logically compare 3.5 million visitors or continue to restrict these visitors and their travel capabilites while thinking about less than 3,000 people and their concerns is abominable. After all, we still are a government for the people and majority rule still does play an important part in our system. At least, I hope it does!

Expansion of the multiple use objectives to include an airport would be beneficial to even those who enjoy the remote and backcountry settings. It will allow more of these people to travel via air to the area and still provide them with over two million acres of public land to explore.

Page, Arizona must have a new airport facility with related industrial use and soon! Currently, the President of the United States cannot land here in his aircraft. Nor can I

as Director of the Page-Lake Powell Balloon Regatta committee, make plans to expand the air show because of the current landing strip and limited space for static display. This event is an important economic boost for the community and has the potential of becoming one of the largest air shows in the country and in one of the most scenic areas but only if the City of Page is allowed use of the Ferry Swale Airport site.

Please do not circumvent the 1984 Paria Wilderness Bill by attempting to impose Alternatives Two or Three of the RMP. Alternative Four is the only logical choice available.

Cordially,

Verna M. Stoddard

Verna M. Stoddard
Director

May 6, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It is apparent that your opinion concerning wilderness is that the only way to have wilderness is to designate the area as such. I believe differently.

Natural conditions, land ownership, existing federal regulation and the lack of demand for any commercial development ensure that the basic character of the entire Arizona Strip region is, and throughout the planning cycle will remain "remote".

I do not find it necessary to tie up 452,800 acres to be assured that we will still have land available for backcountry use. I support alternative #4 from the RMP draft. Please take my view into consideration.

Sincerely,

P.O. Box 441
Kanab UT
84741

V-171

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management[
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After reading the draft Resource Management Plan for the Arizona Strip District, I found there were 4 alternatives reviewed. The 1st alternative is to leave things as they are. Most of us feel this is not good. The other alternatives offer locking up additional areas into designated wilderness.

To lock up an additional 452,800 acres I feel is going way overboard. I understand that taking this step is the preferred alternative. I don't think that a majority of the people will support this alternative. Are you taking into account the needs of the of the people in our area who depend on the Arizona Strip for their livelihood?

I don't feel you are being short sited, but I feel you have intentionally forgotten to examine the whole picture. I support alternative 4. These lands need to remain open for their valuable resources.

Sincerely,

John D. Maddox
Kanab Utah

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District Office
390 N. 3050 E.
St. George, UTah 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona Strip gives little emphasis to the need of these resources for our existence in the area.

It seems in an area where local people have to work so hard for subsistance, that at least some emphasis would be placed on economic benefits. It seems that you have failed to take into account the needs of all the people in this area. It seems that the majority desire to keep this area open for use of its natural resources. Its recreational value is important, but it doesn't rate number 1.

This being the case, I believe the alternative 4 will be the most beneficial to us in this area.

Thank you,

MacRay Hatch
3505 3000 W #75
Kanab, Utah
84741

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

As a concerned citizen of Page, Arizona and surrounding area I ask that you support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

As a long time resident of the area I feel that we should not use any more public lands for Wilderness areas. Some lands should be left for recreation purposes, grazing and mining, etc.

Yours truly,

Debra D. Hudson
P.O. Box 2197
Page Az.

05-67

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I support a wide range of use of the Arizona strip and feel the 4th Alternative of the Draft Resource Management Plan should be supported by you.

Thank you.

Sincerely,

Terry J. Sides
P.O. Box 1853
Page, AZ

V-173

05-68

May 7, 1990

Mr. Dennis Curtis
BLM
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Sir:

Please do not allow the Paria Wilderness are to be put under more restrictions then were decided in the 1984 agreement.

Please support Alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

We urgently need your support.

Thank you.

Barbara Gilbert
Box 623
Page, Ariz. 86040

May 6, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Sir:

I would ask that you support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

Please do not place further restrictions on the land usage for the Strip.

It was agreed in 1984 by all involved that the areas that should be wilderness were designated at that time. Please do not allow this change to take place.

Yours truly,

Dale Holmes
PO Box 475
Page Az - 86040

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

Please do not take any more public use lands away from the public.

We need you to support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

We support the mining, grazing and recreational use of the land involved.

Sincerely,

Stacy Stalnaker
P.O. Box 1362
Page, Az 86040

05-71

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to encourage you to support alternative 4 of the Draft Resource Management Plan for the Arizona Strip District and urge you under no circumstances to place any further restrictions on the land usage.

We do not understand why since the Wilderness Bill has already been agreed upon that you should be putting it back under study area again.

Please do not let this happen.

Sincerely,

Pat Herrington

Pat Herrington
Concerned Citizen

Page, Arizona
P.O. Box 1254

V-175

05-72

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. george, Utah 84770

Dear Mr. Curtis:

Please do not place any additional restrictions on the Arizona Strip land use by supporting Alternative 4 of the Resource Management Plan for the Arizona Strip area.

I support grazing and recreational use of this land and encourage multiple use also.

Please keep this from happening.

Sincerely,

Bernice Johnson.
P.O. Box 1597
Page. Az

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

Although it was a difficult task comprehending what was actually stated in the Resource Management Plan of the Arizona Strip, I was able to somewhat understand it and I wasn't excited about what I read.

According to the draft, economic development has not been truely addressed. The surrounding communities need development of its natural resources, it's forest products, and continued grazing permits. The communities basically support the concept of multiple use. I know of no one who wants to abuse the use of the lands, the water, or the air. I feel that the people in this area also should have a right to support their families.

The present management team at the BLM has been responsive to the people in this area, and I hope this attitude can continue. I don't feel that multiple use management has received enough consideration in the RMP draft. As things stand, I am in support of alternative 4 with changes to reflect multiple useage of our public lands.

Sincerely,

Rosanne Hall
1195 Redwood Tree
St George, Ut 84770

P. O. Box 283
Kanab, Utah 84741

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I realize that every 15 years the Arizona Strip District has to be reviewed and new policies need to be examined. I am writing to you because of my concern over this issue.

Of the alternatives being considered for the area, I am in favor of alternative #4. It seems that the government goes to such lengths to hear the minority that they often forget the majority. I feel that alternative #4 will best meet the needs of all involved. It gives to those who desire more wilderness, but yet makes it possible for those who desire to do so to mine the minerals, graze their cattle, and use the timber that is available.

Of the four alternatives discussed in the report, I feel that alternative four will best meet the needs of all involved. I appreciate your efforts to hear all points of view.

Sincerely,

Betty Purvis
Betty Purvis

05-75

DENNIS CURTIS
BUREAU OF LAND MANAGEMENT
ARIZONA STRIP DISTRICT
390 N 3050 E
ST GEORGE UT 84770

Dear Mr. Curtis

I found the Resource Management Plan draft to be quite discouraging when viewed in light of the potential of the natural resources of the area. Remoteness in prioritized far too much in the plan, and even though there are objectives for various uses, the uses that get shut out are the ones that fall under the objectives of realizing sustained productivity from the renewable resources.

The residents of Northern Arizona and Southern Utah will be directly affected if alternatives 2 or 3 are adopted. This district provides a source of income for many of the people from these communities. These natural resources need to be managed wisely and developed to best meet the needs of us who depend on them. We cannot afford to hand this land over to the naturalists.

I support alternative 4 with alterations made to reflect the need for this land to remain open to multiple use.

Thank you

Kenneth D Chapman
Box 297
Fredonia, Az 86022

V-177

05-76

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It is important that any decisions made concerning the management of land in the Arizona Strip District be made with great care. I have briefly read the draft of the Resource Management Plan, and I have concluded that Alternative 4 would be the most beneficial to the needs of use in our area. This alternative would provide the continued use of the many natural resources available to us.

This alternative could be altered to include management of the timber resources for timber rather than enhancement of other uses. There is a very great need to perpetuate the Ponderosa Pine species in this area. It will not happen if it is harvested as planned in any of the alternatives now proposed. Professional management of this commercial forest land for productivity and sustained yield of timber is essential. Place the management of these timber resources in Category A.

This timber is of great value to us in this area, and we must make sure that it will be preserved and used wisely so as to meet the needs that lie in the future.

Thank you,

Tony Wright

May 3, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most viable solution.

The BLM should promote the development of important natural resources on public lands. We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past decade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

J. Dallas Anderson

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona Strip seems to overlook the need for the Natural Resources prevalant in the district. These Resources should not be put into cold storage.

The Arizona Strip is part of a larger geographical area where there are several primitive areas established and preserved. Remember, not all wilderness areas and remote areas need to be established on the Strip. The limiting factor in the area is not remoteness, but an invitation for wise use and care of the resources.

We need to focus on the need to develop and use these resources. If this area is properly managed, it can meet several different needs. The key is "proper management". Alternative 4 is in the best interest of us in the outlying communities of the Arizona Strip. We need to make a statement that we cannot continue to lock up our resources. Stipulations should be made in the draft to allow for multiple use of this district.

Sincerely,

Box 223
Kanab, Utah
84741

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I am disturbed about the changes that could be taking place on the Arizona Strip. The Resource Management Plan seemed partial towards setting aside more of our valuable resources in favor of wilderness.

Many people depend on the public lands within this district for their livelihoods. Livestock producers depend on winter and year long forage. Mineral development occurs on the Strip. It has a tremendous impact on the Kanab/Fredonia area. The importance of the strip cannot be evaluated only on the lands actually administered by your office, but it must be realized as part of an overall entity encompassing Southern Utah as well.

We are putting great limits on the potential of this land by allowing it to be designated as wilderness. This district should be able to meet the demands of the many who need and use it. That is why I am in favor of alternative 4 with modifications stipulating mutiple use. Lets continue to reap the economical benefits this district is already providing.

Sincerely,

Ken Hamilton
569 E 75 E
Kanab ut
84741

V-179

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I don't understand the need for such emphasis on remotenss in the Resource Management Plan draft. When the area surrounding the Arizona strip is evaluated, one must surely realize that primitive back country settings are presently heavily consentrated both within the Strip and all around it.

The Strip does not need to excude more area from other uses to allow for more wilderness. The BLM must manage the remaining resources very actively and wisely. These areas need to provide multiple use. With the limited private land available for development in our area, it is extremely important that we don't allow our public lands to be tied up into this type of one use plan.

I support multiple use. Adopt alternative 4 and make modifications to allow for such use.

Sincerely,

Linda Haymon
Box 297
Fredonia, Az 86022



May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona seems to be very biased toward remoteness planning. Recreation is a vital part of our area. This plan devotes much attention to remoteness and implies the need to reduce access to some areas on the strip. There are many misconceptions as to the economic benefits derived from primitive types of recreation. It is my feeling that the Arizona Strip should be accessible to a wide range of visitors and not set aside to the wants of a few.

The Arizona Strip doesn't need to be limited to one area of use. Our public lands need to be used by many, thus, it is necessary to see that alterations are made in the RMP draft allowing for multiple use. I support alternative 4 with such changes that allow for multiple use.

Sincerely,

Denise Harrington
369 S. 425 E. #86
Kanab Ut. 84741

May 10, 1990

Dennis Curtis
B.L.M. Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Dennis:

I am always concerned when areas are identified for special management, (A.C.E.C's), (R.C.A's), (S.R.M.A's), wilderness, T&E designation, Riparian, etc. To meet these special management needs require, it would seem, a deviation from the multiple use concept of management. Some require a much greater degree of deviation than others. Some with management emphasis directed to a single use.

The paria plateau S.R.M.A., I feel is too large an area, 227,000 acres. I can see conflicts in management and use, in protecting cultural resources verses increased scenic and recreation use. It would seem more reasonable to identify only those areas with the highest cultural resource values and insure their protection from degradation or destruction. The uses within this S.R.M.A. are just not compatabile. | 1

I am also concerned about identifying some of the A.C.E.C. areas because of the increased use these areas will receive and the vandalism and/or destruction that may occur. I would recommend management protection, but not publicizing the location.

The management of sensitive plant and animal species seems a little open ended as far as interpretation is concerned. I feel special management may be warranted to some degree, but not the same management constraints offered to a listed species. | 2

The Back Country By Ways program will bring about nominations for roads on the Arizona Strip. I feel that if we are to manage far remoteness on the strip, the Back Country By Ways would be in direct conflict with this objective.

One thing that concerns me the most is the identifying of A and B areas. The (B) areas, 613,000 acres, would have more restricted management guidelines over the entire area, to protect remoteness or other unique resource values. I don't feel this special management is needed over all, and that protection to special areas can be done as the need arises, with site specific management prescriptions.

V-181

05-82

1. The Paria Plateau is proposed as a Resource Conservation Area (RCA) due to the importance of several different resources, including the significant cultural resources. The Paria RCA is also proposed as a SRMA for budgetary purposes.

2. It is BLM policy to manage sensitive species or candidate species to prevent endangerment. The candidate list changes yearly as species are removed or placed on the list. Some are removed because inventories find many more than previously known. Other plants are placed on the candidate list because present data shows problems.

The overall document has addressed the purpose, need, alternatives, management and consequences in the R.M.P., but there are many management decisions that will be made based upon interpretation of this document. The adverse impacts of these decisions could be lessoned by the consultation and coordination process.

The question in my mine is how much land do we need under special management protection on the strip? We have 265,000 acres designated wilderness, Glen Canyon National Recreation area, 40,000 acres, Lake Mead National Recreation area, 300,000 acres, Grand Canyon National park, 900,000 acres, and a proposed 613,000 acres in this document.

Until there is an expressed and a determined need for this additional 613,000 acres, I feel we have already identified and set aside enough land for the present and near future need for recreational use and a truly remote experience for the public. These lands are there for the public's use, as they have always been. If the special management that is proposed is needed in the future, that should be the time to implement it. 3

It would seem that the concerns that I have expressed would indicate that I would have to support Alternative 4.

Sincerely,

Duane Blake
1239 E. Lizzie Lane
St. George, UT 84770

3. The 613,000 acres in Area B were recognized as having unique resource values and special management needs. Guidelines were developed to ensure management prescriptions considered the values and needs and resulted in proposed ACECs, SRMAs, RCAs, OHV designations, visual resource management guidelines, etc. RCAs are activity planning areas just as allotment management plans (AMPs) are for livestock grazing or habitat management plans (HMPs) for wildlife. Approval of RCA plans is subject to the completion of EAs, which are public documents. RCAs are areas where several important resource values and uses such as wildlife, woodlands, recreation, cultural, grazing, watershed overlap requiring detailed coordinated resource management planning to reduce conflicts, improve resource conditions, protect significant resources and to design management systems and monitoring.

Merlin and Christine Esplin
Orderville, UT 84758

May 9, 1990

Dennis Curtis
Arizona Strip District (BLM)
350 North 3050 East
St. George, UT 84770

Dear Mr Curtis:

Thank you for the opportunity to comment on the BLM Draft Resource Management Plan. We have reviewed the plan with a great deal of interest, especially as it pertains to the use and enhancement of sustainable and renewable resources and their importance to the well being of the Southern Utah/Northern Arizona area.

In reading the document we have given special attention to the mention of land and resource uses addressed in the plan, plus the lack of emphasis or attention given to long term land users. The plan invites the thought that active useful management affects the environment in negative ways. This is not so, please address the benefits and possible enhancements of active, rather than passive, management. 1

Our major concern with the RMP D-EIS is that remoteness is such a guiding factor throughout the plan. We need no more "remote" areas designated. Our lands in this area are remote without being designated or locked up by federal agencies.

When the surrounding area is evaluated one must surely realize that primitive back country settings (wilderness areas and parks) are presently heavily concentrated, both within the Strip and all around it. The Strip District BLM should not add to the problem of "exclusion" from our lands.

The plan lists various areas as qualifying for special management and these areas are often planned for "area B" designation. In our opinion these are the very sites which should be left open. Often we think we know how to provide habitat or how to protect something special, but in fact we usually do not, and it may well be that the very item we want protected responds more favorably under

05-83

1. The impacts of the proposed RMP are described in Chapter IV. Many of the management decisions would have a positive impact; some are positive to one segment of the environment and at the same time, may have negative impacts to another segment.

05-83 (continued)

resource use than by excluding some or all land uses. What we suggest is to keep the avenues open.

We are also concerned that forest resources did not have more of a significant place in the draft RMP, and we recommend forest resources be added to the plan as an issue. We believe that, even though the forests of the Arizona Strip are not a large part of the land base, they do have the potential to become a very productive and beneficial part. In the opening pages of section II it states this plan will provide management direction that responds to issues and "...meets the specific resource needs" (page II-1), and it also lists some district wide objectives such as using the multiple use concept of management in order to ensure appropriate uses. There is also direction to provide sustained productivity and conservation of the renewable resources. The plan as it is presently written ignores these objectives and directives. 2

The forest land is also presently at high risk to insect and disease infestation because of the stressed condition. There is also a very high fire danger associated with the dense stands and heavy buildup of one-hour fuels (forest litter/duff). Sound silvicultural practices provide ways to deal with these problems and create the desired healthy, viable condition. Please allow provisions for sound, active management in the final RMP and preferred alternative.

Along with stand condition is the closely related factor of habitat provided within the forests. The RMP shows, on map III-19, that the Mt. Trumbull/Mt. Logan area is critical deer habitat. Most of the area we are familiar with is currently not capable of supporting a viable deer population. There is very little understory vegetation, either forbes, grasses, or browse plants. Silviculture could provide treatments to enhance the resources for this and many other purposes.

Watershed values are also enhanced under careful management. On page IV-35, under impacts to soil, water and air, the D-EIS eludes to the idea of timber harvest being bad for watersheds because of surface disturbance. The soils of the Mt. Trumbull/Mt. Logan area are volcanic in nature. Very little runoff is realized from these types of soils, and scarification of the soil only increases infiltration of moisture into the soil. Also, stands of timber can be manipulated to maximize snow accumulation and water storage.

05-83 (continued)

2. Forest management alternatives have been appropriately analyzed and addressed in this planning effort. In the scoping process, public meetings were held for the primary purpose of identifying and scoping out issues to be addressed in the RMP/EIS. Timber and woodland management were not identified as planning issues at that time. Since that time, however, management of the ponderosa pine forests has developed a key public land management consideration and as a result, associated management alternatives have been incorporated and analyzed in the RMP/EIS. BLM's decision is to implement an active forest management program within the ponderosa pine areas which will include appropriate, compatible silvicultural practices and reduction of ground fuels. See also the general respnse to public comments page V-9.

On page IV-39 we read that the forests will, under the preferred alternative, become healthier through selective thinning and "... old growth ponderosa pine would remain uncut". Our concern here is two-fold; 1) thinning gives the idea of small, non-merchantable material being removed instead of treatment across the entire range of size classes in the forest, and 2) there is no clear definition of "old growth". Please provide some direction as to what old growth is. This may be difficult, but if it is to be part of the plan it should be clarified. Under alternative 4 partial old growth removal is discussed, and as if in definition, the clause reads "... 11-inch diameter and larger". Please provide clarification that an 11-inch tree is not necessarily "old growth". Also, note that old growth areas are presently set aside in wilderness areas. The remaining forest land should be managed for enhancement and "sustained productivity" of the resource. 3

Please include language in the final RMP that considers timber harvest as an option and tool, or at least wording that does not exclude it. Generally, the preferred alternative allows selective timber harvest, but on page IV-53 it states, "Harvest of ponderosa pine would not be allowed and the potential for economic benefits of timber harvest foregone." This causes the other verbiage concerning timber harvest to be misleading. There is an obvious inconsistency, please amend the wording to be consistent with the rest of the plan. 4

The D-RMP devoted much time and space to various kinds recreation. On page IV-52 the idea is brought forth that timber harvest is bad for recreation. This is not always true. Often the most actively sought areas of a forest are the ones where management enhances the area. Currently over 9% of the Arizona Strip is designated as Wilderness. This should be sufficient (current trends show wilderness activity decreasing) for the amount of users seeking activities on the primitive end of the recreation opportunity spectrum (ROS). Other users would benefit from active management which could enhance the basic resources of the area.

In conclusion, we again stress the importance of weaving in language and directives that allow active management. Clear objectives should be defined and then "tools" to accomplish those objectives identified. We have used forestry as an example to point out possible oversights and opportunities, but other land uses apply in similar ways. Timber harvest is a tool for managing forests. Grazing is also a tool for vegetative manipulation. Livestock producers also make areas

05-83 (continued)

3. A definition of "old growth" has been incorporated into the glossary.

4. For clarification purposes, a more thorough description of the planned forest management program has been provided in this document. See Table II-1, page II-20.

05-83 (continued)

usable with fencing, water and trail development and other range improvements. Mineral development can provide short or long term access to sites needing special treatments and also provide great economic benefits to local and national economies. Keep all your choices open for opportunity and flexibility, select alternative 4 to allow freedom and potential advantages for future management.

Emphasis should be placed on long-term users rather than so much attention given to remoteness and primitive recreation. Provisions should be made giving incentives to keep them involved as tools for management in steering the actual "trend" of the land for overall improved resource conditions.

Sincerely,

Christine Esplin

Merlin and Christine Esplin

05-84

May 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Az. Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

As a long time resident of the Arizona Strip District I urge your support of alternative 4 of the draft Resource Management Plan.

Restrictions of multiple useage will severely handicap economic development in this area. I strongly support recreation, mining and grazing use of this area.

Multiple use of this land is vital to our growth, please don't allow its curtailment.

Sincerely,

Judith M. Swain

Judith M. Swain
P. O. Box 1597
Page, Arizona 86040

05-85

ARA Leisure Services

Wahweap Lodge & Marina
P.O. Box 1597
Page, Arizona 86040
(602) 645-2433
FAX: (602) 645-5175

May 11, 1990

Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Att: Mr. Dennis Curtis

Dear Mr. Curtis:

Being a concerned resident, and a past three term City Councilman of Page, Arizona, I am writing you to request that you support Alternative #4 of the Draft Resource Management Plan for the Arizona Strip District.

I request that you DO NOT place additional restrictions on the land use for the Arizona Strip!

The draft RMP does not adequately emphasize the role that multiple use of public lands play in the local economies in Northern Arizona and Southern Utah. The commercial activities, including uranium mining, cattle grazing, the filming industries and recreation that occur on public lands in the district have a very meaningful and beneficial impact for all residents of this region. 1

There are many pioneer families who settled in this area and have spent their lives improving the area to make a living and to make the area habitable for others. The people and small communities need and deserve consideration when restriction on land use for the Arizona Strip is even considered. There is so little private land in this area that we need to stop placing additional and unnecessary restrictions on the development and use of such lands.

Federal law requires BLM to consider present and potential use of public lands in its land use plans. Additional restrictions will reduce the potential of the Arizona Strip District in its ability to sustain an important range of commercial land uses.

The Arizona Wilderness Act returned to multiple use the majority of the areas that the RMP now propose for restrictive management.

1. See comment response 04-26-01.

05-85 (continued)

BLM
Page Two

I recommend the elimination of "Guideline Area B" and the adoption of Alternative #1 or #4. Alternatives #2 and #3 are putting the same study area back under restrictive use circumventing the agreement from 1984.

Please do not allow this to happen!

Sincerely,

Harold J. Johnson
Director,
Public Relations

HJJ/lj

05-86

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am not in favor of adding 452,800 acres to the already excessive wilderness designated areas. I have seen that doing this is not always beneficial to the land. You can see a great difference between the Kiabab National Forest, and the Park Service ground around the North Rim of the Grand Canyon. There is so much undergrowth that it is nearly impossible to walk out through the trees.

We need to harvest the timber resources that are available to us. We have the facilities to do so, and we need to keep the people in this area employed. In order to do this we must be allowed to keep the under growth down. I recommend a sheltered wood harvest. These timber areas should be classifed into catagory A with intensive resource useage.

I support Alternative 4 of the RMP draft.

Thank you,

Brent Hatch
210 E 200 S
Kanab Ut.

05-87

May 13, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am not happy about what I read in the draft of the Resource Management Plan for the Arizona Strip District. It is hard to believe that alternative 2 is the preferred method of management. This alternative would discourage local development.

Without this development, there would be several that would suffer the affects of this type of management. In order to be sustained in this area, there has to be future development, or there will be no economic base for us in Southern Utah and Northern Arizona.

These resources are important to us. Of the alternatives available, I feel that alternative 4 favors use and development of these resources. Therefore, I am in favor of this alternative as long as multiple use is stressed under future management methods.

Sincerely,

Deanna J. Slaven
P.O. Box 243
Kanab, Utah
84741

V-189

05-88

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan for the Arizona Strip. I was concerned at the desire of tieing up 452,800 acres from this district. From what I read, I don't feel that this is the right approach to be taken. My choice of the alternatives in the Resource Management Plan for the Arizona Strip is #4.

This land is needed to meet a multiple of needs. We shouldn't put such a limit on what it can do for the people in this area. This plan should be altered to refect multiple use.

We already have enough land tied up into wilderness. There is great beauty in our area, and the federal government has control over an extensive amount of these areas. We can't just cater to the tourists needs. We need to keep some of our lands available for uses other than this. Keeping these lands open for use for their natural resources is critical to all of us in this area.

Thank-you,

Jim Bonham
265 E 300 South
Kanab Utah 84741

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I feel that all steps must be taken to make sure that our public lands remain open for all to use. We are constantly being threatened by those who think more wilderness is needed. We cannot tie up our lands into this type of single use. Multiple use needs to be maintained on the majority of our public lands. After reading the draft of the Resource Management Plan, I am in favor of alternative 4, however, more stress needs to be placed on multiple use management of the Arizona Strip District.

While the RMP does identify specific activities and environmental impacts that my need attention, it also frequently demonstrates that many such impacts are temporary, and that further regulation is unnecessary. The impacts of uranium mining in the District has been shown to be manageable and temporary when properly regulated by the BLM. Alternatives 2 & 3 propose to withdraw additional acreage to "minimize adverse effects of mineral operations."

Existing management has been demonstrated to be adequate to minimize or avoid problems associated with the type of mining that is foreseeable in this District. This being the case, I support alternative #4. The need for area-wide restrictions on use has not been demonstrated.

Thank you,

Wendy Barton
Kanab Ut.
84741

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

Because there is so much of the area around us is tied up into Wilderness, wilderness area study, national parks, etc. there is not an excess of private lands available for commercial development. We are very dependant upon the resources that our public lands provide. These lands should be available for a multiple of uses including grazing, mining, and timber.

Our public lands need to be made available to meet the needs of many. We need to ensure the our cattle will continue to have land to graze on, and that the natural resources remain available to provide economically for many. Our existence in this area is dependent upon these conditions.

After reviewing the RMP for the Arizona Strip I support Alternative 4. We must not lose access to these important resources. Provisions to allow for multiple use of the Strip are essential, and the draft should be altered to allow such use.

Thank you,

Robett Ray

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed a copy of the Resource Management Plan draft for the Arizona Strip. I am concerned that the BLM has gone overboard in its desire to protect this area.

I realize that there are areas of critical Environmental Concern. These should be dealt with, but in the process we should make sure that we tie up as little area as possible to protect them. The RMP has not done that. The BLM should reevaluate the proposed ACECs to determine whether restrictions on the entire areas proposed are necessary.

I support alternative 4; however, a review of this matter is in order. I also feel that modifications need to be made to assure that multiple use of this area continues.

Sincerely,

Robert Stucker

130 W. McKINNEY ST.
FREDONIA, AZ

V-191

kanab city

KANAB CITY
76 North Main #14
Kanab, Utah 84741
(801) 644-2534

Mayor
Bernie Ripper
City Manager
Keith L. McAllister
Treasurer
RaeLene Johnson

May 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing again to comment on the draft Resource Management Plan for the Arizona Strip District. The Kanab, Utah area is an economically depressed area and is vitally affected by the minerals, timber, grazing and recreational uses of the Arizona Strip.

Kaibab Timber and Energy Fuels are two of our largest employers in this area, and a large percentage of their employees live in Kanab. Some of our cattle growers are also involved as well as the recreational industry in both winter and summer.

Most of this area is very remote and I personally feel thst you do not need to make any changes. Our mining company does an excellent job and does not disturb the natural areas except for the actual mining site and this is restored to its original look when they are finished. The timber company does select cutting and property manage the forests, so that they can be productive on a perpetual basis.

Your R.P.M. has been brought to my attention several times in the past few weeks and the more I read and hear, the more I want to protest against it. My wish is for you to "leave well enough alone."

Thank you for your time.

Sincerely,

Bernie Ripper

Bernie Ripper
Mayor

BR/rhj

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I do not feel that the Resource Manangement Plan draft for the Arizona Strip properly addresses multiple use. This area can meet the needs of many people if it is not locked up into a single use plan. Wilderness is important, but I don't see the need to add to what we already have. Multiple use of our public lands is essential to the survival of many. Ranchers and those who profit from the natural resources depend on continual use of these resources. We cannot exist in this area without them.

These restrictions impose substantial costs for public land users and potential public land users. They eliminate opportunities to take maximum advantage of the resources of the District. Chapter IV of the RMP examines impacts only in the context of a single resource.

Because I feel that the collective impacts of such regulations is not identified or is dramatically understated throughout the RMP, I cannot support alternatives 2 or 3. I am in support of alternative 4 with modifactions stressing multiple use.

Thank you,

Kathy Chamberlain
267 E 450 N
Kanab, Ut. 84741

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I do not agree with the preferred alternative (2) in the Resource Management Plan for the Arizona Strip. After a review of this draft, I support Alternative 4 with modifications stressing multiple use.

This region hosts many resources. It needs to be managed in such a way as to make these resources available for our use. We need these resources for our finacial well being.

A better approach would be management planning. Access and road planning are needed in place of remoteness management. An area doesn't need to be designated as wilderness in order to stay that way!

Thank you,

353 E. 300 N.
KANAB, UT 84741

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have examined the draft of the Resource Management Plan for the Arizona strip. I do not wish to see additional regulations from BLM. Remoteness will exist because of its location, lack of population, and lack of roads which are either paved or have easy access.

I have toured the area around the "Arizona Strip" and found that multiple use can and does exist harmoniously. I have toured the area where reclamation has been completed on the uranium site locations. Energy Fuels should be commended for the fine job of replacing the land to its primitive state.

I feel that Alternative 4 is the best alternative of the RMP. We have seen that these resources can be used with out upsetting the environment of the Arizona Strip permanently. If the area is properly managed the resources can be used and recreational opportunities can still abound. We don't need to limit the potential development of this region.

I feel that Alternative 4 with modifications stressing multiple use is in the best interest of everyone concerned.

Sincerely,

Clint Evans
PO-BOX 1113 KANAB UT
84741

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I have read the Resource Managament Plan draft for the Arizona Strip. I wasn't really excited about any of the Alternatives as they were stated. Of the alternatives available I support #4, but I feel that this alternative could be revised to better reflect the needs of the people in this region. It needs to be modified to reflect multiple use of these public lands.

We have many needs that need to be meet from our public lands. Because opportunities to use private lands are so limited, we depend heavily on our public lands to fill in the gaps. Beyond the use of this area for recreation are those who depend on it for their livelihood. This area does much to provide for the needs of many in Northern Arizona and Southern Utah.

I feel that we should revise this alternative to reflect the needs of many. Our alternative should be more in tune with multiple use.

Thank you,
Weldon Glover
146 East 450 N
Kanab, UT 84741

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I have examined a copy of the draft of the Resource Management Plan for the Arizona Strip. My concern lies with the Area B designations.

The RMP lists various areas qualifying for special management. In my opinion, these are the very areas which should be left open so that whatever is needed may be accomplished. If sensitive areas are excluded from certain uses, we may be shooting ourselves in the foot by limiting the management tools available to use.

I realize that we should be concerned about these areas, but I feel that you have been overzealious in your efforts to protect them. Each area should be examined and a decision made on a case by case basis.

Alternative 4 seems to be the best approach to take at this time on the strip. These lands should not be tied up. Lets allow for multiple use our public lands.

Sincerely,

[signature]
P.O. Box 256
Hurricane, Utah
84634

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Many significant changes could occur on the Arizona Strip if Alternatives 2 or 3 are adopted from the Resource Management Plan of the Arizona Strip. Changes would affect livestock operations and mineral exploration/development.

If alternative 4 were adopted many of these operations could continue as presently constituted. This is a very important step if we want to continue to reside in the area surrounding the Arizona Strip. We need to emphasis multiple use of our public lands. They need to be used by all.

Thank-you,

[signature]
Box 205
Escalante, Utah
84729

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I read in the newspaper Congressman Hansen's statement at the Republican Convention in Kanab. Hansen warned about the growing power of what he termed "a new brand of environmentalist--the extremist." He also said, "The environmentalist are by far the strongest people in Washington."

I agree very much with Hansen's statement. I am greatly concerned with the growing trend toward wilderness. At the rate we are going, Southern Utah could well become "wall-to-wall national parks".

We need to take a stand. These environmentalists need to be put in their place. I support alternative 4 of the RMP of the Arizona Strip. Let's let these people know that we are tired of being pushed around. Keep our public lands open to multiple use!

Thank you,

Kenley Glover

281 N. 150 E. #54
Kanab Utah
84741

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am aware that you are examining the Arizona Strip Region to determine if some changes are needed. Although I am not fully aware of all aspects of the Resource Management Plan draft, I am concerned that your desires lean towards setting aside more land for recreational use, and more specifically towards the wilderness type of recreation.

Recreation is important to us all. We are very lucky to live in this area where great beauty abound. We can't ignore the other great resources the Arizona Strip has to offer. Recreational and economical use of this district can exist together.

Alternative 4 is the best alternative available to use. Provisions must be included to allow the use of this land for multiple purposes. Proper management is this key to this success.

Thank you,

Jerry O'Dell

Box 243
Kanab, Utah
84741

05-101

May 14, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I agree with the provisions stated in alternative 4 of the Resource Management Plan for the Arizona Strip. Under this plan, current management would continue in most areas. We cannot allow these resources to be cut off from us. Many in this area have become dependant on them for the livelihood.

Extensive recreational uses will also continue. This area will remain open to those who like to camp, scenic tour, and use their OHVs. There will also be recreation available to the backpackers.

Under alternative 4, I feel that the needs of many can be addressed. This area doesn't need to be limited in the manner that is being planned under the preferred alternative. Modifications should be made to stress multiple use of these public lands.

Sincerely,

Kevin Bunting
P.O. Box 755
Kanab, Ut 84741

05-102

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have skimmed over the draft of the Resource Management Plan for the Arizona Strip. It seems that the "remoteness" trend is continuing. It is time to consider the economic side of this issue.

There is always going to be wilderness land available. I am concerned that at the rate we're going, there isn't going to be land available for grazing and our resources are all going to be locked up. Then what are we going to do?

We depend on these resources for our existence in this area. If we are not allowed to continue to explore the resources, then eventually many are going to loose jobs and have to look for work elsewhere. It is obvious that several in our communities won't be able to stay here if we aren't allowed to use these resources.

Adopt alternative 4. Keep these resources open and available to us now and in the future.

Thank you,

Ben Atkinson
1999 N 2100 W
St George Ut
84770

05-103

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I feel that the Resource Management Plan draft for the Arizona Strip is biased towards the environmentalists. Designating 452,800 is too extreme of a measure. The problems on the Arizona Strip can be handled in such a way as to allow for development now and in the future.

I support alternative 4, it is in the best interest of the residents of Southern Utah and Northern Arizona. We depend on the continued use of these resources. We need to stress multiple use of our natural resources.

Thank you,

Don Glover

Kanab Ut 84741
Box 243

V-197

05-104

Mr. Dennis Curtis
BLM Arizona Strip District
390 North 3050 East
St.George, Utah 84770

May 15,1990

Dear Mr. Curtis:

I have reviewed The Arizona Strip Resource Management Plan DEIS and find the following items which need to be changed:

1. The plan stresses remotness without much management on large acreages of the Strip. Remotness is not about to be lost in this vast area. Planned access is a necessity for the wise management of the resources of the Strip.

2. Multiple Use does not seem in evidence. I see hardly any mention of the timber resource, and what is actually defined is in all the Alternatives to cut or thin for enhancement of some other resource, which is not sound timber management. What little timber area is left for Multiple Use, should be managed intensively for increased productivity.

Sincerely,

Charles P. McCormick

Charles P. McCormick
P.O. Box 211
Fredonia, Arizona 86022

May 8, 1990

Mr. Dennis Curtis
BLM
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

We are asking you to consider the fact that the Paria Wilderness Bill of 1984 was agreed upon by all involved and areas were designated at that time.

Please do not allow further restrictions, Alternatives 2 & 3, to circumvent this agreement.

We urge you to support Alternative 4 of the Draft Resource Management Plan for the Arizona Strip District.

Thank you for your assistance.

Page, Arizona

May 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

The overall focus of the Resource Management Plan for the Arizona Strip is centered on remoteness. I do not agree on the proposed type of management methods. The preferred alternative suggests designating several areas for some type of "special management".

This emphasis is not what the natural resources need. There are adequate primitive areas in and around the Arizona Strip. We now need to actively care for the renewable resources for sustained productivity as you listed in the district wide objectives.

I believe that alternative 4 is the most feasible of the proposed alternatives. It should , however, be altered to reflect multiple use of the Arizona Strip District.

Thank you, Bryce W. Glover

135 N 100 E #15
Kanab Ut 84741

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have briefly examined the Resource Management Plan draft for the Arizona Strip. The BLM's disire to lock up more of our precious lands seems obvious to me. I don't feel that this in the best interests of the majority. I thought that the majority counted when these types of decisions are made.

It is important that we protect our natural resources, but lets not overdo it! Setting aside 77,000 acres into wilderness is acceptible to me if it is absolutely necessary to do this to protect it. Keep our Public Lands open to be used by all in a well managed and reasonable way. Adopt alternative 4, but make modifications stressing mutiple use.

Sincerely,

Carl Bown
1800 N 5 East
George Utt
84730

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

When it comes to the use of our public lands it essential that some of them remain open to multiple use. Our public lands can meet the needs of many, and indeed it is the responsiblity of BLM management to see that this is the case.

I don't feel that the additional regulations that are called for in the Resource Management Plan draft for the Arizona Strip are necessary. Their impact would affect an entire area, and would categorically eliminate or impede other public uses. This is not efficient use of our resources nor good public land management policy. Indeed, elimination of categories of uses on an area-wide basis without regard for the compatibility of a specific proposed use and the protected resource, does not fulfill BLM's obligation to manage for multiple use.

Alternative 4 would be the best method for management of this area. It is essential that measures be taken to assure that the Arizona Strip will be open to the use of many. We can do this by making alterations to the draft representing this need.

Thank you,

Loyd Heyborne
Box 728
Kanab UT 84741

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr Curtis:

I do not agree with your apparent desire to lock up 452,800 acres into wilderness. I have read the Resource Management Plan, and I found little evidence that shows the need for this type of action.

There is no evidence that the foreseeable demand for back-country recreation will ever approach the backcountry recreation capacity of previously restricted lands. Consequently, the additional regulation presently proposed in the RMP is not necessary to preserve the opportunity to experience remoteness throughout either the region or the district.

I feel that alternative 4 is the only alternative that can Keep this land available to the many other needs that we have now and in the future. The loss of these precious resources would cause an economical impact that many could not survive. Thus, I am in support of adopting alternative 4 with modifications stressing multiple use.

Thank you,

Alan Boardman

166 S. 100 W #2
Kanab, UT 84741

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

After reading the Arizona Strip Natural Resource Management Plan, I have selected Alternative 4. I realized that the multiple use of our public lands was not discussed. This plan should be altered to reflect a need for multiple use of these public lands.

The last 20 years the BLM leadership has worked with the people of Southern Utah and Northern Arizona. With the changes of assignments and staff changes, I have began to be concerned about how long this attitude will last. I support multiple use of our public lands, and I feel that those who have positions with the BLM should do the same.

The surrounding areas around the Arizona Strip are economically deprived. Unemployment is high part of the year, and its an on going problem when some people want to limit use to our public lands. I know that by working with the BLM and good planning, that multiple use of lands can and will be benificial to the people in Northern Arizona and Southern Utah. Please consider Alternative 4.

Sincerly,

Carolyn Kirk
492 S 475 E. #88
Kanab, Utah 84741

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I see no need to take prosperious land and tie it up into wilderness. We have seen from previous experience that the resources of the Arizona Strip can be harvested and the land be restored back to it natural state. These resources are vital to our continued residency in this area. Without these jobs, many people will have to relocate their families.

Your decision to put more of our public land into wilderness will cause a great economic stress on the residents of Northern Arizona and Southern Utah. The proposed management prescriptions will adversely affect important segments of the public.

As a result of existing federal restrictions imposed throughout the region, and the relatively limited private land in the region, the communities contained within or located very near to the Arizona Strip District are extremely sensitive to further federal restrictions on the use of this limited land.

The Resource Management Plan lists 4 different alternatives that are being reviewed by the BLM. I am in support of #4. This alternative needs to be modified to stress multiple use in the district. Keep these lands available to the needs of all!

Thank you,

Jerry Johnson 190 W 200 N #25

V-201

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Mr. Curtis:

I have read through the draft of the Resource Management Plan for the Arizona Strip District. I feel that the BLM is narrow in its focus on the only public lands in the area that remain subject to multiple use. This leaves a distorted picture of appropriate management goals.

It doesn't make any sense to look at the need for backcountry recreation in a district already in isolation. If one looks at the regional picture, it is clear that within southern Nevada, southern Utah, and Northern Arizona, there are far more opportunities for the public to experience "remoteness" on public lands than for all other significant competing uses of the public lands combined.

Please reexamine alternative four. I didn't notice any mention of multiple use under this alternative. I support alternative four with modifications stressing multiple use.

Thank you,

Callen Ramsay
425 S. Judd Dr.
Kanab, Ut. 84741

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The residents in this area depend heavily on what little public land is available for multiple use. In our area much of this public land is either within an Indian reservation, or designated for some form of restrictive management by BLM, the Forest Service, or the National Park Service.

I realize that some of our public land needs to be placed under restrictive use of one type or another. It is important that we preserve the natural beauty in our area. But it seems that there is a push to tie up more and more of our productive lands and designate them as wilderness.

The Arizona Strip serves the needs of many people in our area. We can't afford to lose the use of its resources. These mining, timber, and grazing resources cannot be replaced. This area needs to remain a place of multiple use. It is essential that we don't limit it to one use.

I think that the first step to take to assure this multiple use is to adopt alternative 4 with modifications stressing multiple use.

Sincerely,

Dorothy Ripper
P.O. Box 694
Kanab, Utah 84741

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

Dear Mr. Curtis:

I don't agree with the preferred alternative listed in the Resource Management Plan for the Arizona Strip Region. This area can be used by many different people for many different purposes. To think that we can't share this land and make it available to several people seems shortsighted to me.

Within the immediate region, literally millions of acres have already been restricted in one way or another from competing uses to promote backcountry recreation. I don't feel that anyone has the authority to make a decision as serious as this that could cause so much hardship to the people in the outlying communities.

I support alternative 4; however, it needs to be modified to stress multiple use of the Arizona Strip. This region needs to be kept available for multiple use. We don't need to restrict it from all other resources just to have land available for back-packing. Effective management is the solution to this situation, not tieing up more of our public land for this one purpose.

Sincerely,

Laurie Stewart
P.O. Box 176
Kanab, Ut 84741

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Sir:

Please do not place any more restrictions on public use lands, i.e. the Arizona Strip District.

I ask you to support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

I support mining, grazing and recreational use of this land and ask that the BLM do the same.

Thank you.

Sincerely,

Page, AZ 86040

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

There is always going to be wilderness for those desiring to use it for recreational purposes. Natural conditions, land ownership, existing federal regulation and the lack of demand for any commercial development ensure that the basic character of the entire Arizona Strip region is, and throughout the planning cycle will remain "remote".

I do not find it necessary to tie up 452,800 acres to be assured that we will still have land available for backcountry use. I support alternative #4 from the RMP draft. Please take my view into consideration.

Sincerely,

309 East Center #6
Kanab, Ut 84741

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I realize that it is in our best interest that the BLM reviews the Arizona Strip periodically. My biggest concern at this time is that our area may be economically affected by any of the possible changes that could take place.

Because I am financially dependent on the resources of the Arizona Strip, any changes could have a serious affect upon me. I've reviewed the Resoure Management Plan and I don't agree with things as they are stated. This plan is extremely important to myself and to my family. It has an impact on my income.

We need to use and practice good management when it deals with multiple use of our public lands. In the past, the BLM has been responsive and thus, the more restriction and acres tied or locked up in remoteness would be detrimental to the people in this area. After comparing the four alternatives, one must think which is the best for the people of this area. I am in support of alternative 4 with changes reflecting multiple use to reflect the needs of many.

Thank-you,

Mrs Dena M. Evans
P.O. Box 1113
Kanab, Ut. 84741

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George UT 84770

Dear Mr Curtis:

There was a great similarity of the lands proposed in the Arizona Strip Resource Manage plan draft for wilderness designation to those that were released by congress from wilderness designation. Congress determined that these lands be returned to multiple use.

Congress has established processes for wilderness designations and withdrawal actions. It chose not to designate withdrawel of these areas. Much of the local and national support for the wilderness legislation was based on the release of such lands for multiple use. BLM should not now propose to do what Congress chose not to do.

Alternative 4 would be in harmony with the previous actions undertaken by Congress. It should, however, be modified to stress multiple use of the Arizona Strip.

Sincerely,

Avoal T. Larsen
473 So. 410 E. #82
Kanab, Utah.
84741

May 14, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I want to stand up and be counted. I am in favor of alternative 4 of the Resource Management Plan for the Arizona Strip District. It is in the best interest of residents in Kanab and Fredonia.

Many depend on the continued use and development of these resouces for their livelihood. Tieing up 452,800 additional acres would place restrictions on mineral development, timber harvesting, and grazing rights. The effects would be detremental to us if alternatives 2 or 3 are adopted. I support alternative 4 with modifications stressing multiple use of our lands. We all need to use our public lands. Don't limit their use to just a few.

Thank you,

Tony Stutland
66 S GUNSMOKE PASS
KANAB, UTAH

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I attempted to read the Resource Management Plan for the Arizona Strip. I wasn't very successfull in my attempt to understand all of the aspects of this draft. The draft does not provide a clear statement about the nature of BLM's proposed management prescriptions. For example, it repeatedly refers to "management guidelines" for "area B". The "guidelines" themselves are never clearly defined. It is not possible to provide meaningful comment on such guidelines if they are not identified.

The fact that alternatives 2 and 3 call for tieing up 452,800 additional acres into wilderness is very distrubing to me. I don't feel that this is necessary in order to preserve the beauty of this area. I support alternative 4. However, we must be certain that these changes will not affect the resources that we now use. Modifications also need to be made to this alternative stressing multiple use management.

Sincerely, Al Higley
473 So. 100 E. #82
Kanab, Ut. 84741

14 MAY 90

BUREAU OF LAND MANAGEMENT
ATTN: Dennis Curtis
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

As a concerned citizen of Page, Arizona, I am writing to urge you to lend your support to Alternative #4 of the Draft Resource Management Plan for the Arizona Strip District.

My family has lived in Northern Arizona for nearly 50 years — in Flagstaff and Williams, and as one of the Pioneer Families of Page since 1958. All during my life the North Kaibab, Houserock Valley and the Strip Country has been like my family's backyard.

Our family is rich in Tradition regarding the Strip Country. My grandfather, Father and Great Uncle worked and hunted in the lands within the Strip. My Maternal Grandmother travelled the Honeymoon Trail. Her Great Uncle was in the original Hole-In-The-Rock party, and another of her family is buried at Lees Ferry. My Great Uncle was instrumental as a Wildlife Biologist during the Kaibab Squirrel Survey. My father rounded up Antelope for the AZ Fish & Game, for relocation to Southern Arizona. At every opportunity I take my family into the Strip Country — to ensure that my children receive this heritage as I received it from my Father and Grandfather.

Access to several portions of the Strip Country has already been restricted by the Wilderness Act and "Study" areas already set aside. Areas we previously explored are now closed to motorized vehicles. We have no horses to ride into this wonderful country, and my young children are a few years away from back-packing, and the condition of my knees prohibits any serious hiking.

The remote nature of this country will ensure its informal wilderness quality. Formal Wilderness Status will only limit the use of the area by many families and individuals who do not have the means to utilize it within "approved" means.

Recreation aside, this area represents the livelihood of many families and businesses. The Strip has been used for grazing since the time of the earliest Indians and Pioneers. There have miners throughout Northern Arizona and Southern Utah since the late 1800s, and mining will continue to pay a part in the future of this area. The North Kaibab was earlier known as "Buckskin Mountain" because the vast herd of Mule deer was hunted annually by the Indians who required the deer for survival. Dozens of feature-length motion pictures have been filmed in the Strip, beginning in the late 30s. Production companies continue to request locations in the area. Several small communities in Northern Arizona and Southern Utah survive on tourism and the monies spent by vacationers in the Strip Country.

Federal Laws mandate that the BLM provide for use of the land by these many and varied concerns from within both the private and commercial sectors. Placing added restrictions on the use of this land will curtail the potential of the land to support such concerns. New restrictions, above and beyond the Arizona Wilderness Act are not needed.

In summation, I urge that you consider adopting Alternative #4 and eliminating "Guideline Area B". Thank you very much for considering my opinion on this.

Sincerely,

Steven F. Ward

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of <u>all</u> resources.

Thank you for the opportunity to express my views.

Sincerely,

Roger Knudson
P.O. Box 541
Colo. City, Az. 86021

05-123

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

Elizabeth Knudson
P.O. Box 541
Colo. City, Az. 86021

V-207

05-124

May 15, 1990

BLM - Arizona Strip District
390 N 3050 E
St. George, Utah 84770

Dear Mr. Curtis;

My family and I spend quite a bit of time exploring and camping in the Arizona Strip Area. I have tried to remain informed as to the proposals and plans being formulated for this area, and have decided that, in my opinion, alternative #4 of the management plan should be adopted.

Many of our friends here in Page utilize the area for family outings, whether it be camping or hunting, and the restrictions called for in alternatives 2 and 3 would prohibit many of our weekend recreation opportunities.

I also have heard that further restrictions will severely hinder the livelihoods of several Page area residents who are cattle ranchers in the Paria and House Rock Valley areas.

Please do all in your power to prevent this from happening. Thank you for your attention to this matter.

Yours Truly,

Karen N Rinker

Mrs. Karen Rinker

05-125

May 7, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

Please support the 4th Alternative of the Resource Management Plan for the Arizona Strip District.

It is my understanding that when the Paria Wilderness bill was created that all those involved said that the areas that should be wilderness were designated. Why are you now putting this area back under restrictions?

The plan should encourage multiple use such as mining, grazing and recreational us.

Please help us to keep this from happening.

Yours truly,

Page, Arizona

05-126

May 8, 1990

Mr. Dennis Curtis
Burearu of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

As a concerned citizen of the Page, Arizona area I ask that you support the 4th Alternative of the Draft Resource Management Plan for the Arizona Strip District.

As a long time resident of the area I feel that we should not use any more public lands for wildnerness areas. Some lands should be left for recreational purposes, grazing and mining, etc.

Sincerely,

Page, Arizona 86040

May 13, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

My biggest concern after reading the draft of the Resource Management Plan for the Arizona Strip is that there seems to be no mention of multiple use. The Strip can meet the needs of more than one type of people, and I think that it is important that modifications stressing multiple use be adapted into the RMP.

I am against alternatives 2 and 3. We can't afford to lose this much additional land to wilderness. I do support alternative 4 as long as every effort is made to see that access remains to the resources this region holds.

Please consider my view when this issue is settled.

Thank you,

Kirk E Johnson
1723 Kanab Creek Dr
Kanab, UT 84741

V-209

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We are faced with the responsiblity of making some very important decisions concerning the Arizona Strip. I think that the #1 decision that should be made is that we keep these lands available for multiple use. This area can be used by many. We shouldn't shut off the flow of its important natural resource.

Tying up so many additional acres into wilderness is not going to meet the needs of the people in our area. Not only do these lands provide for recreational use, but they also provide an economic base for many people. This area is hard pressed for good year around employment. Tourism is good for some, but it can't provide for all. To take the opportunity away from the people in Northern Arizona and Southern Utah to expand and grow would cause a great economical strain.

I support Alternative 4 of the Resource Management Plan for the Arizona Strip Region; however, it is necessary that modifications be made to it stressing multiple use.

Sincerely,

Pam Miller

P.O. Box 671
Kanab, Ut 84741

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I believe that we need to plan for the future if we want to continue to exist in this area. We must develop our natural resources to provide for future growth in our area.

Alternatives 2 and 3 would stop any future development on the Arizona Strip. It would close any possiblity of agricultural entry into this area, and no future leases would be granted for the use of these public lands. Not only will this affect those involved with Energy Fuels through the mining of these resources, but if will affect future timber harvest expantion and those with grazing permits. We need to balance use and conservation of renewable resources to provide sustained productivity.

Alternative 4 would let this area legally remain open to future development. We can't lock off this area from the needs we may have in the future. Let's continue with multiple use management of this district.

Thank you,

Joe Horsley
227 N. 150 E. #54
Hurricane, UTAH 84741

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

Tommy Cosby
Pinion Ridge Rd 6
Blanding Utah
84511

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of <u>all</u> resources.

Thank you for the opportunity to express my views.

Sincerely,

W/ Crosby Jr.
PO Box 538
Blanding, Ut 84511

V-211

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

Dennis M Crosby

May 15, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I feel that the Resource Management Plan draft for the Arizona Strip has taken to aggressive of steps for land maintenance of the District. This is especially noticable under alternatives 2 and 3.

Management prescriptions for areas of critical environmental concern with cultural values would have more restrictive management. These areas would be withdrawn from mineral location, closed to woodland harvest, vegetation manipulation would be prohibited, and OHV's would be limited to existing roads and trails.

We need to be consciencious of our environment, but I feel that these measures are to extreme. Alternative 4 meets the needs of the ACEC's without locking up these resources. Thus, I support alternative 4 with modifications stressing multiple use management.

Sincerely,

Larry L. Little
Box 130
Kanab, UT 84741

May 5, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The impact that adopting alternatives 2 or 3 from the RMP draft for the Arizona Strip would have on our community would be devastating. I am in favor of alternative 4. This solution would allow us the continued use of the resources on the Arizona Strip. Before making any definite management plans, we need to be certain that multiple use of these open areas remain.

This area is needed for it grazing rights. Cattlemen depend on this location for their livelihood. Several people have transfered into our area just for the employment that opening up this area to mineral useage has provided. We cannot afford to lose all of this! The people of Southern Utah and Northern Arizona depend on it for their economical stability.

Thank you,

Marlene Roundy
P.O. Box 92
Orderville, Utah 84758

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Jack L. Tate
362 W. 400 S. 6H-3
Blanding Ut. 84511

V-213

May 2, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I resent the fact that the BLM sees the need to tie up more of our public lands. Enough is enough! We are surrounded by land that has been set aside for one use or another.

Land doesn't need to be used for one purpose. It's uses overlap. The acreage on the Arizona Strip needs to remain a land of many uses. We don't need to limit it. There is already wilderness area. The cattle are grazed, and the uranium is mined, and there hasn't seemed to be any major problems that I am aware of. Our public lands need to remain open to multiple use.

Of the alternatives available from the Resource Management Plan draft, 1 & 4 are the least restrictive to the public. If there is a need to designate futher wilderness, then I can handle letting 77,000 acres go, but 452,800 is ridiculous! I support alternative 4.

Thank you,

John D. Engels
Virginia H. Engels
Vina B. Chamberlain
Patsy Blackburn
Ivan Sorensen
Diana Lloyd
Allan L. Lloyd
James Penney
Stephanie Penney
Wayne Cox
Julie Cox

05-137

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

The fact that we are facing possible changes on the Arizona Strip causes one to be concerned about what affect it will have on them. I have reviewed the Resource Management Plan draft for the Arizona Strip, and of the alternatives available to us, I felt that #4 was in the best interest of us in these close lying communities. This is a land of multiple use.It should be managed as such. Alterations should be made to reflect this.

It seems that some people feel that in order to save the land, we have to lock it up and make it inassessible to the majority of the people. We do not have to put this land into cold storage. What we do need to do is allow the people multiple use of the land, with greater stress on managing it properly.

We have seen that these resources can be utilized without ruining the land. Regulations need to be made and carried out. Let's not just give up and keep the majority of the people out.

Sincerely,

Brent Bunting
Kanab, Ut.

05-138

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of <u>all</u> resources.

Thank you for the opportunity to express my views.

Sincerely,

P. O. BOX 998
KANAB, UT. 84741

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis:

To adopted alternatives 2 or 3 from Resource Management Plan draft for the Arizona Strip shows a great lack of concern for the people in this area who depend on this region for their livelihood.

We need to emphasize the use of these resources, especially those that naturally replace themselves. The cattle need to have this ground available for grazing. To take these permits from the ranchers could cost them their livelihood. There is no excess of land for grazing. The timber needs to remain available to future needs and demands. Our area depends heavily on the mining of Uranium. Many in our area would have to relocate if these resources were taken away from us.

Your support of Alternative 4 would continue to keep this region open to us in Northern Arizona and Southern Utah who count on it for our livelihood.

Thank-you,

Earl Swanger

Box 156
Orderville ut
84758

V-215

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

Sheryle Thompson
P.O. Box 592
Colo City Az 86021

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Christine Hammon

P. O. BOX 998
KANAB, UT. 84741

BASIC
TRANSPORTATION, INC.

P.O. Box 998
Kanab, Utah 84741

MAY 14, 1990

MR. DENNIS CURTIS
BUREAU OF LAND MANAGEMENT
ARIZONA STRIP DISTRICT
390 NORTH 3050 EAST
ST. GEORGE, UT. 84770

DEAR MR. DENNIS:

WE ARE AN INDEPENDENT CONTRACTOR HAULING URANIUM ORE FROM THE ARIZONA STRIP AREA. THE AREA IN AND AROUND THE ARIZONA STRIP ALREAD HAS MORE LAND DEVOTED TO NATIONAL PARKS, ETC., ETC., THAN NEARLY ANY OTHER AREA OF THE UNITED STATES. WE NEED TO INCREASE RATHER THAN DECREASE THE OPPORTUNITIES FOR ECONOMIC GROWTH IN THIS REGION.

LESS THAN THREE PERCENT OF THE ARIZONA STRIP'S ACREAGE IS IN PRIVATE HANDS AND CONTRIBUTING TO THE LOCAL TAX BASE. BECAUSE OF THE LIMITED PRIVATE LANDS, THIS AREA DEPENDS GREATLY ON MINING AND OTHER USES OF PUBLIC LANDS TO CONTRIBUTE TO THE ECONOMIC STABILITY OF THIS AREA.

WE THEREFORE, PROPOSE THAT ALTERNATIVE 4 BE PUT INTO EFFECT IN THIS REGARD.

SINCERELY,

BASIC TRANSPORTATION, INC.

George R. Hammon

GEORGE R. HAMMON
PRESIDENT

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Mr. Curtis

I have reviewed a copy of the Resource Management Plan draft for the Arizona Strip. I think that it fails to give adequate attention to the mineral potential of the District. It states that the hard rock mineral potential of the District is high, and that earnings from employment in the local mining industry is higher than any other source of employment. It further states that reclamation of mines in this District has been successful. However, the BLM fails to maximize the opportunity of the public to explore for and develop the District's significant mineral resources.

I could support alternative 4 from this draft if it were adopted; however, we need to be certain that these resources are not tied up, and remain available for exploration and future development. I think that the way to do this is to make alteration in this plan that reflect multiple use of the Arizona Strip District.

Thank you

Ron C. Ray
P.O. Box 556
Fredonia Ariz

V-217

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I reside in the area surrounding the Arizona Strip. The employment opportunities that this area has provided are critical to us in this area. Finding good, steady employment that pays above minimum wages is very difficult in this area. I cannot support my family working for a tourist oriented business that barely pays minimum wage.

After examining the Resource Management Plan draft for this area, I fear for my future if alternatives 2 or 3 are adopted by the BLM. Removing these lands from any constructive use adds greater limitations to those that aready exist. I am concerned that if this area doesn't remain open for future use and development, my family may have to relocate.

I am definitely against Alternatives 2 & 3 because tieing up 452,800 acres into wilderness could be very costly to us, the local citizens. I support alternative 4. Keeping this region open for commercial and other multiple uses is the only logical alternative.

Sincerely,

Janet Lou Ray
95 N 100 E
Fredonia Ariz
86022

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Maureen Borlow
Box 344
Colo. City
Az
86021

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs. and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Douglas Cox

05-147

May 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis,

I would like to compliment and thank everyone involved in preparing the Draft Resource Management Plan. I appreciate the many long hours and effort by everyone involved.

I have a great love and respect for the Arizona Strip. My Grandfather Schoppmann started working on the strip in 1913 ranching and his uncle several years before him. Grandfather Art Greene operated a business involved in recreation with river trips and back country trips on the strip beginning in 1943. I agree that we should keep this area a special place as it will always be to me.

As you read and learn about or visit the strip, you'll find that very few people live or even visit the remote areas today. Grazing, mining, and recreation has been part of the strip since first discovered. It is part of the history and needs to continue.

I feel that alternative #2 and #3 reintroduce most of the same lands looked at under the 1984 Wilderness Act and puts them in a more restrictive management. It is more costly to manage and with budget constraints and is not a good management decision.

I also feel that you should not stop the gathering of wood on the Paria Plateau. Most of the people that gather wood from that area are Native American. They will help protect the resource and they are in need of this wood.

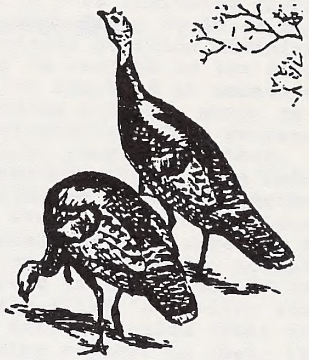
Alternative #4 , in my opinion would be the best at this time.

We need to remember that multiple use has been an important part of the history of the strip and the local economies of Northern Arizona and Southern Utah.

Sincerely,

John Schoppmann

V-219



05-148

City of Page

P.O. Drawer HH
897 Vista Ave.
Page, Arizona 86040
(602) 645-8861

May 11, 1990

Mr. Robert D. Roudabush
Vermillion Area Manager
U. S. Bureau of Land Management
Arizona Strip District
225 N. Bluff Street
St. George, UT 84770

Dear Mr. Roudabush:

This letter serves to formalize comments and concerns of the City of Page, regarding the draft Bureau of Land Management Arizona Strip Resource Management Plan. Specifically, the City of Page is very concerned that the Bureau of Land Management designated "Alternative #2", which includes a recommendation that rules out Ferry Swale as a possible airport site. The City believes that this determination is premature, and will ultimately have a long term detrimental affect on visitation to the Page/Lake Powell/Navajo community. We believe that the Bureau of Land Management should not foreclose the Ferry Swale option until such time as alternate site analysis is done to determine an optimum site to service the Northern Arizona-Southern Utah recreation areas. The City of Page offers the following points to support this request; each will be discussed separately: 1

I. The recommendation will hurt tourism and economic development in the Page/Lake Powell/Navajo communities.

That portion of the southwestern United States that is becoming known as The Colorado Plateau, consists of the states of Arizona, Utah, New Mexico and Colorado. The Colorado Plateau contains within it national parks, monuments, historic sites, wilderness areas and cultural resources in much greater concentration than any other geographic area of the contiguous United States.

At the Center of the Colorado Plateau area is a particularly dense concentration of these attractions known as the Grand Circle, which contains within it such sites as Monument Valley, Canyon de Chelly, the Grand Canyon, Mesa Verde, Bryce Canyon, Zion, and the Arizona Strip.

1. See comment response 04-29-01.

At the very heart of the Grand Circle itself is Lake Powell, with Page, Arizona being the most logical point of ready access to this spectacular and totally unique concentration of historical, cultural and recreation opportunities.

Providing for and assuring these resources are preserved, made accessible to all Americans and increasing numbers of foreign visitors, should be the goal of all agencies of our government, as well as various environmental groups.It should be noted that a vast number of these potential visitors to the Grand Circle area are simply unable, physically, to trek into and out of these areas on foot or even by means of some of the more standard modes of transportation.

Most potential visitors lack the time to tour the Grand Circle area by way of surface transportation. Access into Page/Lake Powell and the Grand Circle, is simply not available today due to the total inadequacy of the Page Airport.

The City of Page is actively pursuing a plan to locate a major jet-capable airport here as a key access point. Providing ready access is absolutely essential if visitors from all walks of life and possessing even minimal physical abilities are to enjoy some of the unique wonders of the world and beauty this area has to offer. Tourism provides the most compatible economic base for the Page/Navajo communities to develop. Limiting air service to the Page area will greatly effect the growth of tourism as an economic base.

II. The Bureau of Land Management recommendation is based upon generalized safety and environmental concerns. They are not backed by data, research, studies of knowledge of applicable standards.

Since late 1978, the Bureau of Land Management has been aware of the potential need for relocation of the Page Airport. Summary findings of an initial City/Airport Master Plan completed in 1977-78 indicated a number of future deficiencies at the current location. Ferry Swale was identified as a potential location in 1978. Bureau of Land Management land acquisition policies only recognize immediate need and require development within one (1) year. The planning process for Bureau of Land

Management administered lands is the only method to indicate long term land use needs. In 1985, when informed of the RMP program, and again in 1987, the City repeated its potential requirement for a new airport site. Federal Aviation Administration (FAA) and Arizona Department of Transportation (ADOT) Aeronautics Division airspace studies in 1986 indicated traffic patterns and area use would permit Ferry Swale as a possible location. The Federal Aviation Administration (FAA) took one (1) year to respond to the airspace study request. They also required an update of the Master Plan for the existing airport, prior to authorizing a site study for relocation. This process encompassed two and one half (2 1/2) years altogether. Another factor impacting the existing site was the refusal of Federal Aviation Administration (FAA) to approve another airport location for the TVOR. The ground clearance required for this directional facility severely impacts the developable land on the airport. Acceptance of the new Master Plan occurred in the summer of 1989, and the City of Page immediately filed for a site study grant. The Federal Aviation Administration (FAA) offices had not included the pending request in their 1990 funding; they delayed it until 1991. The Arizona Department of Transportation (ADOT) Aeronautics Division and the City of Page are actively pursuing joint funding and the completion date of the site study is now mid 1991.

Airport development is a lengthy process. If all factors proceed smoothly, a minimum of six (6) years could see the completion of initial construction. Up to eight (8) or nine (9) years for site study, weather data, land acquisition, engineering, grant applications, bidding, and construction is more realistic.

Several factors drive the current need to seriously consider moving the Airport to some location in the immediate area:

1. Federal Aviation Administration (FAA) safety standards are continually being developed. The current airport cannot accommodate clearance requirements, safety areas, and improved landing systems without major overhaul. There is not enough land on the ends of the runways to meet the minimums. Accomplishing the changes, would also mean significant impact on useable land within the airport boundaries.

2. Geography makes runway extension impossible at the present site. Extending pavement would result in the loss of required safety areas which is unacceptable to the Federal Aviation Administration (FAA).

3. Before the incorporation of the City of Page, land development adjacent to the Airport occurred which resulted in blocking access to the property over most of the perimeter.

4. Because of the access problem, topography and the TVOR, land useable for support services vital to an airport is almost nonexistent.

5. Even if relocation does not occur, and Master Plan changes at the present site are completed, the airport is expected to reach operational capacity within fifteen (15) to twenty (20) years. This refers to general aviation traffic capacity because larger aircraft cannot be adequately accommodated even with major improvement.

6. Increased aircraft size already causes a congestion problem at the Airport. General aviation parking with the new apron is at a premium on some weekends in the summer. Further expansion will be difficult.

7. The Page Airport is an important focus point in the air transportation pattern in Northern Arizona and Utah. The inability to continue its improvement, will be felt in the whole region.

It should be noted, in separate public meetings held on February 15, 1990 and March 27, 1990, as well as the City Manager's telephone discussion with Ray Maatston/Dennis Curtis in Early March, 1990, Bureau of Land Management staff stated that alternate airport sites had not been studied or analyzed.

Bureau of Land Management concerns about noise, air and water quality, crosswinds and adjacent service development were voiced by Bureau of Land Management Staff. They agreed that the RMP's basic recommendations on safety and environmental concerns were not backed by data, research or knowledge of applicable standards.

The Airport Study referred to above will provide technical data on the Ferry Swale site. Additionally, the study will analyze and provide a technical base for other possible alternative airport sites. During the hearings mentioned above, Bureau of Land Management staff suggested that the City of Page request that the airport portion of the land management plan be "put on hold, postponed or a decision be withdrawn regarding Ferry Swale until technical information was available".

The City of Page concurs and respectfully asks the Bureau of Land Management to put on hold, postpone or withdraw the Ferry Swale recommendation pending the completion of the Page Airport Site Selection Study.

III. The recommendation creates conflict with present uses of the Arizona Strip, and applicable Federal law.

The Land Use Plan objectives as stated in the summary are as follows:

- Manage for multiple use
- Protect unique features and special resource values
- Maintain remote character
- Manage resources in cooperation with adjacent land agencies

The Paria Wilderness Area is a recent addition to the nation's index of such lands. The Government placed that tract very close to a high level visitor use corridor. Common sense indicates there is going to have to be some adjustment when one is only located a couple of air miles from the other; and the recreation usage will continue to expand. Government agencies appear to be setting up the conflict between remoteness and intensive recreation by placing the two land functions so close together.

Throughout the public hearings and telephone discussions with Vermillion Area Manager, Robert Roudabush, Staff concern was expressed for finding a balance between wilderness factors and the economic/social needs of the surrounding communities. Bureau of Land Management Staff stated that its recommendations regarding Ferry Swale are based upon provisions of P.L. 88-577, the 1964 Wilderness Act,

05-148 (continued)

and P.L. 98-406, Arizona Wilderness Act of 1984. It is noted that the text of these laws calls for protection of natural values, and solitude of wilderness areas. However, it should also be noted that the later Act of 1984, exclusive to Arizona, under 16 USC 1131(d) states as follows:

> "(d) The Congress does not intend that designation of wilderness areas in the State of Arizona lead to the creation of protective perimeters or buffer zones around each wilderness area. The fact that nonwilderness activities or uses can be seen or heard from areas within a wilderness shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area."

Further, subsections (e) and (f) of the same section refer to other State jurisdictional issues covered under Paragraph (6) of Section 4(d) of the 1964 Wilderness Act, which states as follows:

> "(6) Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas."

The City of Page would argue that the literal interpretation, chronological order and special reference to the Arizona Wilderness in these statutes require the Bureau of Land Management to present hard solid data to support a finding that an activity will negatively impact a wilderness area. We do not believe that there is now, in lieu of the Airport Site Selection Study, enough data for a finding that the Ferry Swale is not a possible airport site. Indeed, the report may show that an airport to the South of Page, Church Wells, or on the Navajo Indian Reservation, could have more flight path impact on noise levels of the Paria Wilderness Area than one at the edge of Ferry Swale. 2

We believe the Bureau of Land Management goals listed above are noble and well intentioned to manage land resources in the Arizona Strip. We support these goals, however, we believe that these resources need to be managed cooperatively with <u>all</u> agencies.

2. The BLM is not opposed to the construction of an airport for the city of Page, and BLM will continue to work with the city in identifying the best site. See change in text, page II-9.

05-148 (continued)

Mr. Robert D. Roudabush
Bureau of Land Management
May 11, 1990
Page Seven

In summary, the Page/Lake Powell community serves as a hub of the Grand Circle, a host to a growing tourism population discovering the natural wonders of this area. The projections for future visitation continue to climb and significant numbers of the United States population in distant regions will be restricted access to this area if reasonable air flights are not available. Impact upon the Page community will be enormous, over time, if it is restricted to a general aviation airport. The runway at the current location cannot be extended and available land for support activities is extremely restricted.

A Federal Aviation Administration (FAA) sponsored Master Plan was adopted in the summer of 1989. It set moving the airport as its primary goal. Staff is currently proceeding with the next step, a site survey of the surrounding area. Ferry Swale may not be the best site, but sufficient evidence on it or alternate sites is not yet available. As stated, such a technical study is scheduled to begin during the summer of 1990.

Finally, we believe that P.L. 98-406 et seq 16 USC 1131-1132 provides the Bureau of Land Management with ample statutory guidance to keep open the Ferry Swale option. We recognize that the Bureau of Land Management has received many negative comments about perceived environmental impacts of increased air traffic. We are not asking the Bureau of Land Management to approve of the use. However, we believe all interests can only be served by allowing technical studies to qualify the impact of an airport on the environment. As such, the City of Page, with this letter, formally requests that the Bureau of Land Management put on hold, postpone or withdraw a decision on the Ferry Swale site until such time as the impacts can be qualified.

If we can provide further information, or help in this matter, please contact Mr. Curtis A. Shook, at 602-645-8861.

Sincerely,

Gary Scaramazzo
Mayor

GS;CAS;pc
xc: Honorable Representative Bob Stump
Honorable Senator Dennis DeConcini
Honorable Senator John McCain
Honorable Governor Rose Mofford
Page Airport Board
Sent Certified Return Receipt #P-493 143 461



05-149

Kaibab FOREST PRODUCTS COMPANY

P.O. Box 218
Fredonia, Arizona 86022

602/643-7361

May 16, 1990

Mr. Dennis Curtis
Arizona Strip District Office
390 North 3050 East
St. George, UT 84770

Dear Dennis:

On behalf of Kaibab Forest Products we are pleased to have the opportunity to comment on the BLM Resource Management Plan for the Arizona Strip.

Our concerns center on the following issues:

1. Include timber as one of seven issues.
2. The replaceable timber resource in the Mt. Trumbull, Mt. Logan (Unikaret), Parashant and Black Rock Mountain areas.
3. Access planning and maintenance.
4. Multiple Use Management within the commercial timber type.
5. Cooperative Management efforts to allow a full spectrum of integrated resource potential.
6. Greater recognition of the needs of local people in the management of the 2.8 million acres of land within the Arizona Strip.
7. Recommendations for management in the Arizona Strip.

1. We feel that professional timber management should be added to your planning issues as, "Issue Number 7". Though the area capable of growing 20 cubic feet per acre per year is small (15,200 Acres) compared to the entire 2.8 million acres in the Arizona Strip planning area, we feel it would be remiss not to include it along with the woodland type, as one of the multiple use values to be addressed under the direction stated in the Federal Land Policy Management Act.

1

DEDICATED TO EXCELLENCE

V-225

1. In the public scoping process, meetings were held for the primary purposes of identifying issues to be addressed in the RMP/EIS. Timber and woodland management were not identified as planning issues at that time. Since then management of the ponderosa pine forests has developed as a key public land consideration and, as a result, associated management alternatives have been incorporated and addressed in the draft RMP/EIS.

05-149 (continued)

2. We have spent considerable time inventorying, measuring and studying the commercial timber type near Mt. Logan and have found the area to be an excellent ponderosa pine growing site. We calculated the site index of the area to be about 80 - i.e. in 100 years under professional management with careful adherence to stocking control, trees can be expected to grow to a height of 80 feet. This is slightly better than the average ponderosa pine belt on the North Kaibab Plateau. Growth rings on the ponderosa pine trees showed remarkable growth early in the life of the tree, but due to competition with close tree neighbors the growth rings soon became very close, sometimes so narrow or close they were difficult to discern without powerful magnification - essentially growth had stopped. (see attached display)

This has resulted in stagnation of the stands in the Mt. Logan area , which makes them virtually a biological desert for wildlife. The RMP shows, on map III019, that the Mt. Trumbull - Logan area is critical deer habitat. Much of the area is not currently capable of supporting a viable deer population. Wherever there has been a fire or blow-down, opening the forest canopy, brush and scrub oak have come in and provided a habitat for turkey, but deer and big game are virtually nonexistent. Good silvicultural management of these ponderosa pine stands would enhance wildlife habitat for big game and perpetuate the timber resource, which is not regenerating in these brushy areas. It would also reduce fuel build-up and subsequent fire conflagrations.

The Preferred Alternative #2 on page S-14 suggests some management with Old Growth retentions. The area open for management is surrounded by Federal withdrawals (Grand Canyon National Park, Mt. Trumbull Wilderness and Mt. Logan Wilderness) which encompasses considerable areas of Old Growth. Old Growth needs definition - on page IV-79 "Old Growth is listed as an 11" tree or larger. This is not "Old Growth" - we measured trees 16 inches in diameter which were only 62 years old and other trees 7 inches in diameter that were over 100 years in age. Age, in all biological entities is part of the function of vigor and in forest types, it is an integral part of trees' ability to overcome insect attack and disease. In professional forestry terms, the removal of suppressed, senescent, insect-infested, diseased, old trees is good forestry practice which promotes more vigorous, healthy stands of trees and a correspondingly healthy forest. With so much "Old Growth" already set-aside in the wilderness areas, a wonderful opportunity exists to practice Multiple Use and Sustained Yield management on the remaining 15,200 acres of commercial forest land. This represents only 0.5 of 1% of the planning area. Careful silvical considerations can be given to the timber resource, since a large block of "Old Growth" has already been set aside in the adjacent wilderness area. Wilderness, which is a single use, represents 9.2 percent of the planning area and is no longer available for multi-resource uses. With the growth potential of this timbered area, it's silvical needs could and should be a major management feature.

05-149 (continued)

2

2. The importance of the resources involved, dependent values, identified problems and needs and the points raised in the letter clearly call for a more active management program in the ponderosa pine forests located outside of the wilderness areas. Accordingly, BLM's proposed action is to develop and implement an active, carefully designed long-range program directed toward managing, maintaining and protecting ponderosa pine forest areas located outside of the wilderness areas. This will be addressed in plans and associated EAs that will have public review.

3

3. Old growth stands are one of the important components of the ponderosa pine ecosystem and among the natural values which make these forested areas popular for recreation and other public uses. Retention of "old growth" stands is a part of the planned management program. Where considered appropriate in this multiple use situation, the program also provides for removal of insect-infested or diseased trees. A revised definition of "old growth" has been incorporated into the glossary.

The placement of the commercial forest land open to Multiple Use in Category "C" (Management for enhancement of other uses) will adversely effect the vigor and health of the forest stands. The silvical needs of the forest seem to be overshadowed by the emphasis on the remoteness component of the plan. With such a large planning area of 2.8 million acres, there seems little basis that "Remoteness" is currently in jeopardy or will be threatened in the foreseeable future. However, as our population grows "remoteness" can be continually maintained through road design, maintenance, and management. This is further discussed in item 3.

We do not concur that timber harvest would have a negative impact on wild turkey or raptors. The opposite has been experienced in the south and Kaibab squirrel studies on the North Kaibab have shown cyclic shifts in population having little relationship to timber harvest.

To comment briefly on the socio-economic aspect, the U.S. Forest Services' economic studies and their accompanying reports in the Timber Sale Program Information Reporting System support a very positive benefit, showing that for every one million board feet of timber harvested, 11.1 man years of employment is generated with payrolls of up to $395,000 per year plus the added revenues for support services such as gas stations, grocery stores, dry-goods, recreational equipment, homes, etc. In addition, 25% of the receipts, which could be from $7,500 to $15,000 (for each million feet, depending on market conditions), would go to the counties for schools and roads - funds that now must be paid by county property owners from a very limited private land tax base. The basic economic tenet, that all wealth must come from the land, is not being recognized - materials that are needed to build homes that shelter our people must come from the land - one million board feet will meet the wood requirements to build approximately 100 three bedroom homes. This replaceable timber resource with only a modest harvest (compared to potential growth) of one to one and a half million board feet annually would materially help sustain the fragile economic base of the Arizona Strip communities.

3. As our population grows, it is very probable that the recreation opportunity spectrum will shift toward the urban end. This is not bad, because all of our people deserve the same opportunity to enjoy the public lands including the old, the young, the infirm, the handicapped as well as the healthy vigorous Americans. Good planned access is the ultimate key, not old existing ways that are meant to discourage entry or encourage detours or challenges to the adventuresome. Good access is possible through management of the resources. The replaceable resources and their long term sustained yield will always contribute to access needs and good continual access is necessary to assure future harvests and their perpetuation. The 310,000 acres of woodland, along with the 15,200 acres of commercial forest land, should be an integral part of the present and future access needs. Their contribution will be sustaining and continue over time in the form of maintenance. Good road planning includes design, construction,

05-149 (continued)

4

5

4. Based on thorough consideration of all factors, it is our judgement that the most appropriate public land management and multiple use decision is to designate the ponderosa pine forests outside of the wilderness areas as Category C. This decision is not based on remoteness, but rather on the multiple use needs and objectives associated with the ponderosa pine areas. We are confident that the management program will benefit rather than adversely affect the ponderosa pine ecosystem even though it may not improve the productivity of ponderosa pine to the level preferred from a commercial forestry or timber production standpoint.

5. Timber harvest can have an adverse impact on wild turkey and raptors because of the disturbance and dislocation caused by logging operations and the changed habitat conditions that occur. However, we maintain that carefully designed forest management programs which factor in habitat management needs, objectives and improvement opportunities can be beneficial to these species. The intent of BLM's forest management program is to make such habitat considerations a major component so that optimum benefits to wildlife can be accomplished.

05-149 (continued)

closures, and maintenance as wells as servicing the multi-resource products such as, recreation, wildlife, and amenities. This includes roads needed for extractive resources. An example of good road planning, location and design is the access road into Hack Canyon. Road management with road closures can still maintain the remoteness aspect of the large Arizona Strip with little or no damage to the land, compared to letting the roads just happen.

4. To reemphasize the mandated Multiple Use and Sustained Yield objective in the Federal Land Policy Management Act, the limited timber resource within the Arizona Strip begs a place for Multiple Use Management to enhance the timber resource rather than another resource which is already receiving priority treatment on thousands of acres. Multiple Use must recognize and manage all available resources on a variety of acres, rather than emphasizing just one or two on the entire planning area.

5. The BLM has about one seventh the personnel, one third the money and four times the land area of the Forest Service. Therefore, to do a high quality professional job of land management, innovative means are essential to make your dollars stretch. One such tool is your contracting authority for all phases of land management. This includes contract cruising, marking, thinning, planting and in some areas the full land management job - road location and design - security patrols. We see this as a means of stretching dollars to do a complete professional land management job with the maintenance and enhancement of the resources for long-term productivity (CFR 40 - 1502.16).

6. There should be greater management emphasis on the needs of the local people, who depend on the public lands within the Arizona Strip for their livelihoods. There needs to be economic coordination of resource uses in the Strip and adjoining lands. For example, livestock producers depend on winter range and yearlong forage - mineral development on the Strip produces much needed economic input to the Kanab/Fredonia area is essential for a stable wood products industry. The continued and sustaining wise Multiple Use of the many resources on the Strip for long term users (People who live on or adjacent to the Strip and wish to remain) is essential in a difficult economic environment. Many environmentalists are far removed, from the Strip and do not make their livelihood from the area, thus, do not realize the long term impacts of locked-up areas, restricted management or defacto wilderness.

05-149 (continued)

6

6. We agree that the ponderosa pine forests merit more focused management within the multiple use and sustained yield objectives of the FLPMA. In this multiple use situation, it is our judgement that management should be focused on maintaining healthy, viable and biologically diverse forest ecosystems primarily for the enhancement of, and long-term needs of, wildlife, recreation, livestock grazing and watershed protection, rather than focused just on enhancement of the timber resource or commercial forestry.

7

7. Properly managing and ensuring adequate protection of the ponderosa pine forests are complex challenges. In addition to using a multi-interest advisory group to help guide the program, we intend to explore a number of ways of ensuring that a complete and professional management program is implemented.

8

8. This RMP considers the economic needs of local industry and people who depend on these public lands for their livelihood. Also considered are the requirements of the FLPMA that these public lands be managed on the basis of multiple use and sustained yield and in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource and archeological values; that, where appropriate, will preserve and protect certain lands in their natural condition; that will provide food and habitat for wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use. When an activity plan is developed, interested parties and adjoining land owners will be invited to participate and will have the opportunity to review and comment on the associated EA.

05-149 (continued)

7. RECOMMENDATIONS:

We recommend Alternative 4 as the Preferred Alternative for improved Multiple Use Management with modifications to insure that the objectives of Forest/Woodland Resources on Page II-21 are met. "Designations" and "Management Direction" should be strengthened as follows:

Management Direction: Green woodcutting areas would be marked and permittees directed to areas managed in accordance with woodland management plans. Woodcutting for camping use is permitted everywhere except no chain saws in the wilderness areas. Dead and down woodcutting is permitted in the designated Vermillion Resource Area. Sell up to 500 Christmas trees annually in the Shivwits personal use area on a first come first serve basis. Designate new commercial Christmas tree areas needing access and thinning and prepare management requirements, including the necessary residual stems per acre, road location, specifications and design.

FORESTS:

Designations: Designate 15,200 acres of ponderosa pine in the Unikaret (Trumbull - Logan), Parashant and Black Rock Mountains in Management Category A, which are forest lands available for intensive Multiple Use Management.

Management Direction: Management direction would be focused on improving productivity through proper silvicultural prescriptions for ponderosa pine. Management would also be designed to reduce fuel build-up. Management practices may include shelter-wood harvests, intermediate cuts, overstory removals, thinnings for stocking control, salvage harvests for insects and disease and fire kill plus prescribed burns for site preparation. The overall objective is to increase productivity and maintain a viable, vigorous forest that would meet long-term needs of the timber and associated resources available for Multiple Use management as opposed to single use in the adjoining wilderness areas. Either evenaged or unevenaged management systems may be used to meet these resource needs.

DISCUSSION:

Generally, the Preferred Alternative (#2) allows selective timber harvest, but on page IV-53 it states, "Harvest of ponderosa pine would not be allowed and the potential for economic benefits of timber harvest forgone." This is far too restrictive for Multiple Use Management and also places the timber resource at risk with the prospect of "NO" management.

The acreage differentials between Alternative 2 and Alternative 4 for Woodlands on page II-11, amounts to 26,500 additional designated acres in Alternative 2. If Alternative 4 is more oriented to wise use of the resource, it seems this acreage would be the same or more for Multiple Use Management? On page IV-79 "Old Growth" is defined as an

9. Our data indicate that the most appropriate public land management and multiple use decision is to designate the ponderosa forests outside of the wilderness areas as Category C rather than Category A and manage them accordingly. Category C encom passes lands where the forest management is for enhancement of other uses.

10. Management in this multiple use situation should be focused on maintaining healthy, viable and biologically diverse forest ecosystems primarily for the enhancement and long-term needs of wildlife, recreation, livestock grazing and watershed protection rather than focused on improving productivity of ponderosa pine or associated commercial forestry. As explained in the proposed action, management programs may include ecologically sound and carefully managed silivicultural practices that would make wood products available of public or commercial use, disease control, prescribed burns and prescribed management of naturally-occurring fires.

11. This section has been revised to more clearly state the impacts of the forest management aspects of the proposed action. While commercial forestry or harvest are not objectives of the proposed action, management programs may include ecologically sound and carefully managed silivicultural practices and salvage that would make wood products available for public or commercial use.

12. While it is understood that positive environmental impacts can result from carefully planned and executed harvest operations, it is also a fact that timber harvest can and does adversely affect the quality of the visual resources at least

05-149 (continued)

11 inch or greater tree. This definition is not consistent with our discussion in item 2 above.

On page IV-52 a positive environmental impact is implied if there is no harvest of timber. There is ample evidence on both the National Forests (Cutting in scenic areas) and the National Parks (Removal of dead timber in the Teton National Park campgrounds) that timber harvest can enhance recreation immediately through careful cutting practices and cleanup or the perceived impact is very transitory in a small portion of the forest area. Certainly, one of the adverse consequences of inadequate harvesting of ponderosa pine, (That is, for the enhancement of other resources, Alternative 2 page IV-52) is the biological risk of reduced growth and the inability of this species to regenerate under these conditions.

SUMMARY

It is within our science and it's application to make a difference and to use our knowledge and skills for the benefit of our society. We can let the timber resource stagnate, deteriorate and die through non-use and the subsequent forces of nature, or we can nurture it, increase it's growth many fold and have a continual vibrant forest from which may uses will evolve. Through management, increased biological diversity can be attained, multiple age classes can be realized, increased forage for wildlife and livestock will result, perpetuation of the ponderosa pine species will be assured, increased growth will result, and recreational potential such as, hunting, camping, visual vistas, and wilderness trail heads will be accessed. All of these benefits can be maintained on a sustained bases.

Right now the timber resource is out of balance - there are virtually no young age classes, the existing intermediate stand is stagnated and highly susceptible to fire, insects and disease due to the competition for light, moisture and nutrients.

There are some breaks in the forest canopy where a small fire has occurred, but competition with brush has kept out most of the ponderosa pine regeneration with a resulting slow loss of the pine species. One of Nature's devastating scorching forest that kills everything in a wide area is the type of disturbance nature uses to prepare the site for pine regeneration. However, this could take hundreds of years, and leave a number of human generations with a legacy of the loss of may resources. Good silviculture could change this scenario for human benefits by properly controlling site preparation and avoid the loss of thousands of beautiful trees as well as wildlife habitat, which is what happened last year with the Yellowstone catastrophe. Professional management will assure multiple-age classes for a sustaining forest, and continued Multiple Use with its supplies of goods and services including maintenance of amenity values.

In conclusion, there should be greater emphasis placed on the needs of long-term resident users, as they are the tools of your management and will be essential as you monitor the actual trend of the land's response to management of all the resources. Remove both surrogate and perceived restrictions on the lands that should be managed for Multiple Use.

12

05-149 (continued)

in the short term and also the quality of the experience of some recreation users. Thus, it is appropriate as part of this analysis of environmental impacts to state that positive impacts to recreation users can be realized by not harvesting timber resources.

We hope these concerns and comments will be helpful in the production of a dynamic Arizona Strip Resource Management Plan, that will address the needs of the residents as well as the visitors, the economic well-being as well as the aesthetic.

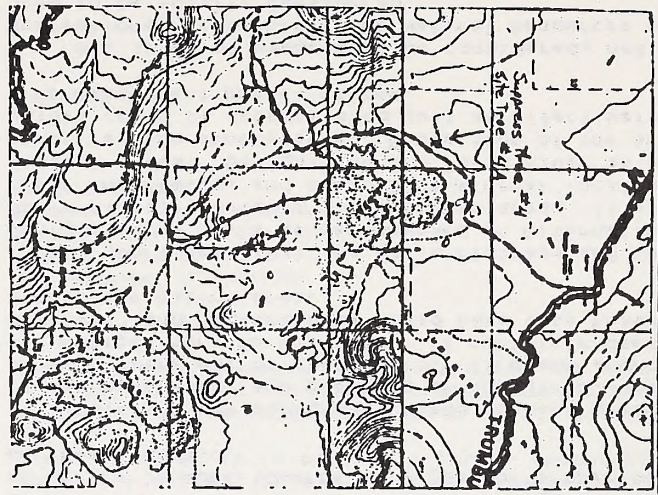
Sincerely,

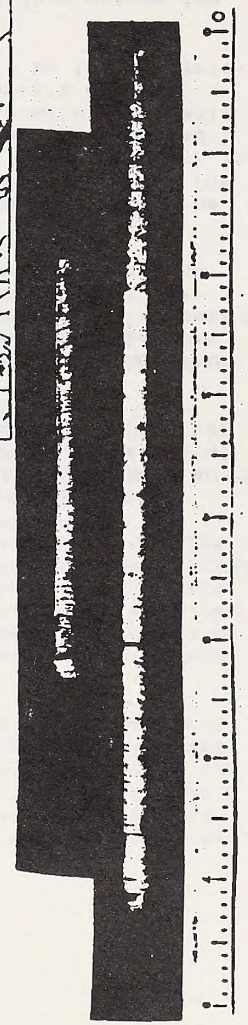
Merlin Eyestone

For: James L. Matson
Vice President Timber Resources
Kaibab Forest Products
Fredonia, Arizona

Enclosure

05-149 (continued)





MT. LOGAN PONDEROSA PINE

Tree # 414A Date 1/23/90

Location NW¼, SE¼, NE¼
Sec. 5, T. 34 N., R. 6 W.

Diameter @ Breast Height (DBH)
16 ½ 16.6 inches.

Breast Height Age 54 ½ 65 yrs.

Total Tree Height 59 ½ 72 ft.

Site Index (base age 100) 100.

Average Ring Width .06 → 1.5 inches.

Map Scale 1.3 inches = 1 mile.

May 18, 1990

DENNIS CURTIS
BUREAU OF LAND MANAGEMENT
ARIZONA STRIP DISTRICT
390 N 3050 E
ST GEORGE UT 84770

Dear Mr. Curtis

I found the Resource Management Plan draft to be quite discouraging when viewed in light of the potential of the natural resources of the area. Remoteness is prioritized far too much in the plan, and even though there are objectives for various uses, the uses that get shut out are the ones that fall under the objectives of realizing sustained productivity from the renewable resources.

The residents of Northern Arizona and Southern Utah will be directly affected if alternatives 2 or 3 are adopted. This district provides a source of income for many of the people from these communities. These natural resources need to be managed wisely and developed to best meet the needs of us who depend on them. We cannot afford to hand this land over to the naturalists.

I support alternative 4 with alterations made to reflect the need for this land to remain open to multiple use. For example the Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and all areas now under livestock permits should be managed for Multiple Use. RCA's, SMRA's, and other restrictions to Multiple Use should not be employed.

Thank you

Ray Wilson

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

Achieving a proper balance in land usage on the Arizona Strip seems to be an impossible task. I feel that the adoption of Alternative 4 from the Resource Management draft is essential if we are to work towards this goal of proper balance in the use of these lands.

Multiple Use management needs to have greater consideration in the management and planning of the Strip. Multiple use does no mean every use on every acre. It means a broad range of uses are managed for and approved. It certainly does not mean "remoteness" and "naturalness" need have such heavy consideration across the entire area.

I don't feel that the Paria Plateaus and Canyons should be designated as ACECs as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. It is not necessary to close the Plateau and canyons to mineral location and woodland product sales. Designating the Paria River as a wild and scenic river is also unnecessary. Protection of the area's various values could be accomplished just as effectively by less restrictive management prescriptions.

All types of usage must be considered, not just useage for Recreational resources. The Natural Resources available to us need to be equally considered.

Sincerely,

Eldin Martin
Pres Chamber of Commerce

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

Enough of our public land has been tied up on the Arizona Strip for wilderness. I support Alternative 4. More of our land needs to be available for multiple use.

After examining the Resource Management Plan draft for the Arizona Strip I feel that some change is in order. I believe that more of the area in the district should be managed for multiple use. Areas that should be designated as multiple use areas and placed into Category A are Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits.

The BLM has been managing the district very well, thus I think that the present management practices should continue.

Thank-you,

Travis Clark

V-233

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, UT 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona Strip seems to overlook the need for the Natural Resources prevalant in the district. These Resources should not be put into cold storage.

The Arizona Strip is part of a larger geographical area where there are several primitive areas established and preserved. Remember, not all wilderness areas and remote areas need to be established on the Strip. The limiting factor in the area is not remoteness, but an invitation for wise use and care of the resources. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic reiver are unnecessary. Protection of this area could be accomplished just as effectively by less restrictive management prescriptions.

We need to focus on the need to develop and use these resources. If this area is properly managed, it can meet several different needs. The key is "proper management". Alternative 4 is in the best interest of us in the outlying communities of the Arizona Strip. We need to make a statement that we cannot continue to lock up our resources. Stipulations should be made in the draft to allow for multiple use of this district.

Sincerely,

Lisa Johnson

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Pl for the Arizona Strip.

As an employee of a contracting company which is involved uranium mining on the Arizona Strip, I depend on our public lan and their resources for my livelihood. I am very concerned th the land be managed for multiple use and not further restrict for the sake of values such as "remoteness" which, in my opinic are not in jeopardy. The very nature of the Arizona Strip (t few roads, small amount of water, rugged terrain, etc.) wi protect the remote character of the land for the foreseeat future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip the ability of us local residents to find and keep secure, dece paying jobs in the face of ever-increasing government regulatory controls. With the huge amount of federal lands the region (much of which is already withdrawn from commerci activities), we have been forced to rely on lower paying, oft seasonal jobs in the government or tourist-related sectors. T mining and timber industries provide many of us a decent livi as well as an essential source of tax revenues for c communities.

As much as I would prefer no additional restrictions on t lands of the Arizona Strip, I realize that political realiti dictate that some land management revisions be made. With th in mind, I recommend that the BLM support Alternative 4 wi modifications that will ensure intensive multiple use of s resources.

Thank you for the opportunity to express my views.

Sincerely,

May 19, 1990

MR DENNIS CURTIS
BUREAU OF LAND MANAGEMENT
ARIZONA STRIP DISTRICT
390 N 3050 E
ST GEORGE UT 84770

Dear Mr. Curtis

I have studied the Arizona Strip Resource Management Draft. Of the 4 alternatives, I feel that alternative 4 is the best proposal.

I am not in complete agreement with this alternative as it is proposed. It should be altered to reflect the need for more multiple use of this area. Areas that I feel should be managed for multiple use are areas now under livetock permits, woodland areas, Parashant and Black Rock Mountains, and the Logan and Trumbull areas.

In order for our survival in this great land we need to develop our natural resources. Locking them up underground only causes a great amount of hardship for all. It's important that these resources remain available to us. The cattlemen depend upon this area for grazing. This land needs to continue to be available for multiple use. We do not need to lock them up so that a few hikers might use them to do some backpacking. There are about 265,00 acres for backpacking now. That's enough!

Thank you

Ora Glover

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis

I have skimmed over the draft of the Arizona Strip District Resource Management Plan. Alternative 4 is my choice. We already have excessive lands designated as wilderness.

It is necessary to review the present management practices, but we shouldn't go overboard in the actions that we take. The workers of the BLM have done a good job of managing the Arizona Strip. They seem to be in tune to the majority of the people in this area. A major change is not in order.

I feel that the BLM is well aware of the economic impact of multiple use of the lands. We need additional exploration of our natural resources. We need to continue to promote grazing. We do not need additional restrictions. Some areas that should be managed for multiple use and placed into category A are Logan and Trumbull, Parashant and Black Rock Mountains, Woodland areas, and areas now under livestock permits.

The Arizona Strip is remote and will remain remote inspite of all the policies. We don't need additional restrictions.

Thank you,

Donna M Pollman
[illegible]
Kanab, Ut [illegible]

V-235

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N. 3050 E.
St. George, Utah 84770

Dear Mr. Curtis:

I don't feel that the timber potential of the Arizona Strip has been fully recognized in the Resource Management Plan draft for this area. Timber should be listed as one of the seven issues on the commercial forest land. The preferred alternative is inconsistent and vague on the language addressing timber management and the possibilities of timber harvest and economic development from timber receipts.

More area should be managed for multiple use. Some of the areas are Logan and Trumbull, Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits. Of the alternatives available in the RMP draft, I feel that # 4 should be adopted. It is important that we keep these timber resources open to our use and not tie them up in wilderness area designation. It's adoption will continue to ensure our access to these resources.

Sincerely,

C B Martin
110 Red Shadow Dr.
Kanab Ut 84741
Chairman Kane County Republican Party.

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After reading the draft Resource Management Plan for the Arizona Strip District, I found there were 4 alternatives reviewed. The 1st alternative is to leave things as they are. Most of us feel this is not good. The other alternatives offer locking up additional areas into designated wilderness.

To lock up an additional 452,800 acres I feel is going way overboard. I understand that taking this step is the preferred alternative. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed management methods such as closing the Plateau and canyons to mineral location and woodland product sales, or designating the Paria River a wild and scenic river are unnecassary. The valuable resources of this area could be protected just as effectively with less restrictive management methods.

I don't feel you are being short sited, but I feel you have intentionally forgotten to examine the whole picture. I support alternative 4. These lands need to remain open for their valuable resources.

Sincerely,

Melanie Pallmann
591 N 300 E #196
Kanab, Ut 84741

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

Lori Walker
727 S 175 E #14
Kanab Ut 84741

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan for the Arizona Strip District, and I am convinced that Alternative 4 is the best choice.

I feel that alternatives 2 and 3 are ludicrous. People in this area are trying to live, to support their families. By tieing up more lands, it will lock out economic development and deprive the citizens of this area opportunities for jobs. It would impact our economy, thus providing hardships for the people of this area. I certainly do not support any additional lands to be tied into wilderness areas.

The Paria Plateaus and Canyons should not be designated as ACECs as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values could be accomplished just as effectively by less restrictive management prescriptions. I strongly support alternative 4, and hope this letter will be given some consideration.

Sincerely,

Hope Dalton

V-237

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I do not feel that the Resource Manangement Plan draft for the Arizona Strip properly addresses multiple use. This area can meet the needs of many people if it is not locked up into a single use plan. Wilderness is important, but I don't see the need to add to what we already have. Multiple use of our public lands is essential to the survival of many. Ranchers and those who profit from the natural resources depend on continual use of these resources. We cannot exist in this area without them.

The Parashant area should not be designated as a RCA as you suggested in alternative 2, nor as a SRMA as is proposed in alternative 3. Restricting new permanent grazing permits, new permanent roads, and improved access is not consistent with multiple use management.

These restrictions impose substantial costs for public land users and potential public land users. They eliminate opportunities to take maximum advantage of the resources of the District. Chapter IV of the RMP examines impacts only in the context of a single resource. Because I feel that the collective impacts of such regulations is not identified or is dramatically understated throughout the RMP, I cannot support alternatives 2 or 3. I am in support of alternative 4 with modifactions stressing multiple use.

Thank you,

Stan Clark

05-162

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan for the Arizona Strip. I was concerned at the desire of tieing up 452,800 acres from this district. From what I read, I don't feel that this is the right approach to be taken. My choice of the alternatives in the Resource Management Plan for the Arizona Strip is #4.

This land is needed to meet a multiple of needs. Under Alternative 4 the Paria Plateau should be managed for Multiple Use. ACEC and SRMA designations are inappropriate as they would essentially put a buffer against the existing wilderness resulting in defacto wilderness. Such areas have already been eliminated by study, and the actual wilderness, with no buffers, has been approved by congress. We shouldn't put such a limit on what it can do for the people in this area. This plan should be altered to refect multiple use.

We already have enough land tied up into wilderness. There is great beauty in our area, and the federal government has control over an extensive amount of these areas. We can't just cater to the tourists needs. We need to keep some of our lands available for uses other than this. Keeping these lands open for use for their natural resources is critical to all of us in this area.

Thank-you,

Amy Sorensen

406 E 400 S #87

Kanab, UT 84741

05-163

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I reside in the area surrounding the Arizona Strip. The employment opportunities that this area has provided are critical to us. Finding good, steady employment that pays above minimum wage is very difficult. I cannot support my family working for a tourist orlented business that barely pays minimum wage.

After examining the Resource Management Plan draft for this area, I fear for my future if alternatives 2 or 3 are adopted by the BLM. The Parashant area should not be designated a RCA as you suggest in Alternative 2, nor as a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. Removing these lands from any constructive use adds greater limitations to those that aready exist. I am concerned that if this area doesn't remain open for future use and development, my family may have to relocate.

I am definitely against Alternatives 2 & 3 because tieing up 452,800 acres into defacto wilderness could be very costly to us, the local citizens. I support alternative 4. Keeping this region open for commercial and other multiple uses is the only logical alternative.

Sincerely,

Sheldon Sorensen

Sheldon Sorensen
406 E 400S #87
KANAB UT.
84741

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The Arizona Strip District Resource Management Plan draft leaves me very concerned. All four alternatives are ridiculous. The Parashant area should not be designated a RCA as you suggest in Alternative 2, nor as a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

We have too much land locked up in wilderness without trying to lock up more. Wilderness will happen, and it will happen without designation. Designation will also lock out any future development of our natural resources. The area will remain remote because of its location, limited roads, and lack of residents.

We don't need additional regualtions to insure wilderness. We need to develop our natural resources. We need to provide jobs and an opportunity to support our families. We need a broader tax base. We need resources to improve our school systems and services to the disabled and disadvantaged. We don't need a playground for the rich. Of the alternatives available, I support Alternative 4.

Thank you,

Arden A. Campbell

V-239

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Too much of our public lands have been locked up by designating them as wilderness or wilderness study areas. I am concerned about your desire to continue this trend in the Arizona Strip Region.

After I reviewed the RMP for the Arizona strip, I came to the conclusion that alternative 4 is the proper approach for you to take when determining the type of management this area will receive. Too much land has already been designated wilderness. "Remoteness" needs to be kept inline with the other needs of this area.

I also feel that the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values could be accomplished just as effectively by less restrictive management prescriptions.

Industry that has moved into our area because of the natural resources on the Arizona Strip have provided primary jobs. Wages are good and the people of Kane County and Northern Arizona have had the opportunity to provide a good living for our families. Every effort should be made to see that these resources remain available to us, and that the majority of the land on the "Strip" remain open for multiple use.

Sincerely,

Darlene S. Campbell

05-166

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
ST. George, UT 84770

Mr. Dennis:

I have studied the Arizona Strip District Resource Management Plan, and I strongly support Alternative 4. I would like to see the following changes in this plan. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. This area already contains wilderness area. Proposals to close the Plateau and canyons to mineral location and woodland product sales, and to designate the Paria River as a wild and scenic river are not necessary. Protection of this area's various values could be accomplished just as effectively with less restrictive management methods.

Why must we continuously fight for to keep our public lands from being tied up into wilderness? We are surrounded by wilderness. We are either locked up by wilderness designation, or by the ACEC areas. We need to increase opportunities for economic development, not continue to lock lands up from further development. We do not need additional restrictions.

At this point in time, I feel that the BLM has done a fairly good job of managing the Arizona Strip Area. If a change is in order, then decrease the amount of land that has to be designated wilderness.

Sincerely,

Katrina Riding
485 S. 410 E.
Kanab Utah
84741

05-167

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Roger Walter
Box 546
Kanab Ut 84741

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Lucinda Eaton
92 J So 175E #24
Kanab Ut 84741

V-241

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

The Arizona Strip has provided for the needs of so many that it is crucial we not take the importance of this area lightly. We must carefully examine the impact of the different alternatives from the RMP drat. They could cause serious problems to the people of Northern Arizona and Southern Utah now and in the future.

The Parashant area should not be designated as a RCA as suggested in alternative 2 nor as a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

This land, with its great resources, was created to provide for us. Of course, that doesn't mean that we should be foolish in the ways that we develop these resources. We should be given the opportunity to manage the forests on the strip to show what a well managed forest provides.

It is important that this land be a land of "multiple use". Lets learn to share and get along. Alternative 4 could provide us with this opportunity.

Thank you,

Dina Lee Grant
189 S. 1st E. Kanab. Ut.

05-170

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan draft, I feel that the it does not emphasize the positive impact of the multiple use of public lands in Northern Arizona and Southern Utah. It does not address the economic impact of mining, grazing, and other muliple uses of the lands.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, nor as a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

After the completion and review of comments submitted, I recommend that the BLM support Alternative 4. I feel that enough land is designated wilderness, and that management of this land has been good.

Sincerely,

[signature]
Box 70
Kanab, Ut. 84741

05-171

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

It is important that any decisions made concerning the management of land in the Arizona Strip District be made with great care. I have briefly read the draft of the Resource Management Plan, and I have concluded that Alternative 4 would be the most beneficial to the needs of use in our area. This alternative would provide the continued use of the many natural resources available to us.

This alternative could be altered to include management of the timber resources for timber rather than enhancement of other uses. There is a very great need to perpetuate the Ponderosa Pine species in this area. It will not happen if it is harvested as planned in any of the alternatives now proposed. Professional management of this commercial forest land for productivity and sustained yield of timber is essential. Logan and Trumbull, Parashant and Black Rock Mountains, Woodland areas, and areas now under livetock permits should be managed for multiple use.

Thank you,

[signature]
[illegible] Hamblin
193 N. 1st E., Kanab, Ut.

May 16, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have examined the draft of the Resource Management Plan for the Arizona strip. I do not wish to see additional regulations from BLM. Remoteness will exist because of its location, lack of population, and lack of roads which are either paved or have easy access.

I have toured the area around the "Arizona Strip" and found that multiple use can and does exist harmoniously. I have toured the area where reclamation has been completed on the uranium site locations. Energy Fuels should be commended for the fine job of replacing the land to its primitive state.

I feel that Alternative 4 is the best alternative of the RMP, however the Paria Plateaus and Canyons should not be desiganted an ACEC as recommended in Alternatives 3 and 4. The Paria already conains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreation, etc.) could be accomplished just as effectively by less restrictive management prescriptions.

I feel that Alternative 4 with modifications stressing multiple use is in the best interest of everyone concerned.

Sincerely,

Peggy Palmer
PO Box 1117
Kanab, Ut 84741

V-243

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

M. V. Christensen
President
KANAB Transportation Inc.

05-174

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Floyd C. Knudson
P.O. Box 541
Centennial Park, Az.
86021

05-175

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area; however, the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. the Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of this area's various values could be accomplished just as effectively by less restrictive management prescriptions.

We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Shawn Alvey
483 S 100 E #181
Kanab, UT 84741

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Mr. Curtis:

Mutliple use of our public lands provide ways for us to support our families. Because of the public lands available tb us, we can provide a better way of life for the people of this area. Our society is healthier because these lands are available for our use.

This draft of the Arizona Strip District Resource Management Plan can impact that way of life for my family if Alternatives 2 or 3 are adopted. We need to be concerned with the amount of acres locked up in wilderness. We certainly do not want to adopt a policy that would cause great grief to many people in the surrounding areas.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. Restricting this area to new permanent grazing permits or new permanent roads or improved access is not consistent with multiple use management.

I give my total support to alternative 4.

Sincerely,

Carolyn Earley
Box 384
Fredonia Az. 86022

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District Office
390 N. 3050 E.
St. George, Utah 84770

Dear Mr. Curtis:

The Resource Management Plan draft for the Arizona Strip gives little emphasis to the need of these resources for our existence in the area.

It seems in an area where local people have to work so hard for subsistance, that at least some emphasis would be placed on economic benefits. It seems that you have failed to take into account the needs of all the people in this area. It seems that the majority desire to keep this area open for use of its natural resources. Its recreational value is important, but it doesn't rate number 1.

This being the case, I believe the alternative 4 will be the most beneficial to us in this area. Changes should be made in the draft reflecting the need for intensive multiple use of the district. Areas that should be managed for Multiple Use are Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, Woodland areas, and areas now under livestock permits.

Thank you,

Jackie Thelen

P.O. Box 1100
Kanab Ut.
84741

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

Alan Black
163 N. 500 W. 48-9
Blanding, UT 84511

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Callie J. Thurston
85W 500N 20-6
Blanding, Ut 84511

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action. I feel, however, that some changes should be made to better reflect multiple use management. Areas that should be designated for multiple use and placed into Category A are UniKaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and all areas now under livestock permits.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

Craig [illegible]

V-247

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. The Parashant area should not be designated as a RCA as has been suggested in Alternative 2, nor as a SRMA as was proposed in Alternative 3. I don't feel that proposed management methods are in harmony with multiple use management. Restrictions not allowing new permanent grazing permits, new permanent roads, and improved access are not consistent with mutliple use management. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

D. Taylor

05-182

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternative 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreational, etc.) could be accomplished just as effectively by less restricitive management prescriptions.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Barbara [illegible]

05-183

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned over your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" . BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate. The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

[illegible]

05-184

May 15, 1990

Dennis Curtis
BLM
AZ Strip District
390 North 3050 East
St. George, UT 84770

I have reviewed the AZ Strip District Draft RMP/EIS and have the following comments.

V-249

1. I am concerned over the possibility of commercial harvest of the ponderosa pine forest in the Mount Trumbull / Mount Logan area. This forest is unique due to its geographical isolation from other forests and the limited logging which has occurred in the past. The presence of large diameter (greater than 24" dbh) yellow pines and high quality (tall, greater than 20') snags are a result of the limited logging. This provides excellent habitat for turkey, goshawks, and non-game birds. I am concerned over the impacts to wildlife habitat which would result from commercial harvest. I am opposed to Alternative 4 because of commercial harvest, and especially the harvest of old-growth habitat, for the purpose of producing forest products. While Alternative 2 states this area would be "forest management for the enhancement of other uses", several things in your document concern me: 1

1. See general response to public comments page V-9.

page II-48 "Maintain a viable productive forest" and page III-23 "there is now interest and proposals to harvest timber on the Kaibab Mountain". I feel the productivity of the forest should be measured in wildlife capacity - not boardfeet or inches of growth a year. Although I prefer that no harvest occur in this area for the life of this RMP, harvest would be acceptable if the driving force was wildlife habitat. I feel Alternative 2 should be strengthed so that it can not be applied to meet requests of the timber industry. In this area, timber should be the by-product of designing wildlife habitat conditions.

2. I support the use of prescribed fire in the ponderosa forest providing down woody material is provided in old-growth stands.

3. On page III-26 under Kaibab squirrel it should be noted that timber harvest can reduce or eliminate habitat capability based on information from studies on the Kaibal forest and also studies on the closely related abert squirrel. 2

4. Please keep me informed of your selection of a proposed alternative.

Sandra J. Nagiller P.O. Box 52 Parks, AZ 86018

05-184 (continued)

2. The habitat requirements of the Kaibab squirrel is an example of wildlife needs that must be factored into the planned forest management program, since modifications such as thinning can have adverse impacts. The intent is to make such habitat considerations a major component so that benefits to species such as the Kaibab squirrel can be accomplished and adverse impacts avoided.

05-185

NORTHERN ARIZONA AUDUBON SOCIETY
P.O. BOX 1496 SEDONA ARIZONA 86336

May 18, 1990

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

V-251

Re: Draft Resource Management Plan/Environmental Impact Statement for the Arizona Strip District

Dear Mr. Curtis:

Attached are comments submitted on the above Resource Management Plan by Prescott Audubon Society. Please consider these same comments from Northern Arizona Audubon. We agree completely with Prescott Audubon.

We would like to stress the following issues:

1. Spraying for grasshoppers or other insects should not be considered.
2. All the areas listed under part IV for ACEC designation
3. Any additional roads should be kept to aminimum and unnecessary roads should be closed.
4. All riparian areas should be protected through special management.
5. All T & E or sensitive plant species should have special protection.

Thank you for the opportunity to comment on this draft.

Sincerely,

Anita MacFarlane

Anita MacFarlane
Conservation Chair
505 Morgan Road
Sedona, Arizona 86336

These comments are the same as those submitted by the Prescott Audubon Society. Therefore, refer to comment letter 04-12 and its associated responses.

05-165 (continued)

Page Ref.	Comments on the BLM's Resource Management Plan Draft for the Arizona Strip
	I. We feel that the range of alternatives is skewed towards consumptive uses of the area's resources, as opposed to conservation for the following reasons:
	A. Alternatives #2 and #3 are very similar
	1. Same acreage of ACEC's.
S-15	2. Alternative #3 confuses recreational and environmental concerns. These two uses are contradictory in some ways. For example, increased visitor use could have a negative impact on wildlife.
S-20	3. Surface disturbance difference between #2 and #3 = 25 ac.
	B. More ACEC's or B areas were recommended by the public to encompass the area adjacent to Grand Canyon National Park's northern border. If Alternative #3 were really an environmental alternative, it would include these recommendations by the public.
S-4 S-5	C. In Alternative #2 vs Alternative #3: 445,210 ac -Alternative #2 Special Management Areas; 452,800 ac - Alternative #3 Special Management Areas. This is not a significant difference in acreage compared to 2.8 million total acreage.
	II. Some general comments are:
	A. We would like to see all of the public's comments published and responded to. (Does this happen anywhere in the BLM's RMP process?)
	B. The range of possible management practices are not fully explained for the public to evaluate.
II-29	C. In many places all recreational activities are lumped together, i.e., ORV's sight-seeing, backpacking, trapping, etc. In spite of Appendix 20, which defines ROS classes, each alternative should clearly distinguish between high and low impact recreation activities.
	D. We are pleased that the BLM is not recommending the Ferryswale airport proposal.
	E. The maps in the Draft RMP were of such poor quality that they were useless. Landmarks, roads, etc. should be included, in order to accurately access what practices are being considered in what areas.

Page Ref.	
	(The maps on E.A.'s for individual mines have been better than these maps.
	F. We feel it's better to keep the 200 ft. right-of-way on the Paria Plateau, than to have one mile-wide right-of-way, as is suggested.
Table III-29	G. The tourist trade is being undervalued on the Arizona Strip. User days should be given a dollar value, in order to accurately assess the tourists' and recreational users' effects on the local economy. According to the BLM's data (Table III-29), only 1-2% of the area's income is derived from mining, for local residents.
	H. All right-of-ways should be located in areas where it doesn't interfere with scenic value.
	I. The terms "desirable plant community", "undesirable plant community" and "stagnant community" are used in the draft RMP without being defined. A "desirable plant community" should consist of native plant species and exclude introduced species. Every effort should be made to restore plant communities to their original condition with native plant species. Vegetative treatments or conversion should be undertaken with this ultimate goal in mind.
	J. Spraying for grasshoppers or other insects should not be considered. The long-term benefit is doubtful, the chemicals are hazardous to other living organisms and the natural balance is upset.
	K. Care should be taken to maintain the primitive and remote character of the area. Improving visitor services should only consist of signing the more heavily used roads. Other information could be included on the area's visitor maps, and not in the field in Paria, the Vermillion Cliffs Natural Area, and the Parashant area.
	III. We are concerned over the lack of documentation and coordination with Grand Canyon National Park. According to the BLM Manual, they are mandated to coordinate with other Federal State agencies whose land is adjacent to BLM lands.
	A. The BLM should respond to the official stance of the Grand Canyon National Park Service since they request Alternative #3 instead of the BLM's preferred Alternative #2. We were told that the Grand Canyon National Park Service also feels that Kanab Creek should be designated as an ACEC area.

Page Ref.

B. The remote and primitive qualities of land adjacent to the Grand Canyon should be maintained. By law, the BLM is mandated to maintain the special values of land adjacent to the Park.

IV. We believe the following areas should be included under ACEC designation; or deserve some special consideration.

A. Kanab Creek should definitely receive ACEC status, in spite of the BLM's rationale for dropping it. The Grand Canyon National Park Service feels it should be an ACEC, and the BLM should coordinate with the Park Service. Kanab Creek contains riparian lands, it has dramatic canyon scenery which is very different from much of the Arizona Strip, and Peregrine Falcon inhabit Kanab Creek. Kanab Creek is also rich in archeological sites - and further surveys should be done to protect and identify more sites.

B. The lower part of House Rock Valley should be included as a B area. Visually, the area as a whole is important, and it also should be designated as Class II air quality. Highway 89A through House Rock Valley should be a scenic highway. (How does the BLM plan to protect the scenic by-ways?) All power lines in House Rock Valley should be buried.

C. The Witch's Pool area is known to be rich in archeological sites and therefore 1,000 acres should be protected.

D. The Marble Canyon ACEC should be 15,000 acres, as suggested in Alternative #3, to adequately protect threatened and endangered species.

E. Vermillion Cliffs Natural Area should remain designated as such.

F. Severe grazing problems are evident at the mouth of Paria Canyon and in the Vermillion Cliffs Natural Area. These grazing problems need to be addressed, and grazing plans should be adjusted downward to reflect the impact of the drought Arizona has experienced over the past two years.

G. Andrus Canyon should be designated as an ACEC, in spite of your conclusion in the draft RMP. Again, the BLM Manual 1613.22 A-4 states that public lands adjacent to designations of other government agencies must be reviewed to determine if the special values extend into the planning area. Andrus Canyon is near Lake Mead National Recreation Area, and the beauty and remoteness of the area is important to maintaining the integrity of the scenery in Lake Mead N.R.A.

H. All ACEC areas should be closed to mineral exploration and entry.

V. The mining claims on the Arizona Strip are so numerous that they deserve special consideration and more than perfunctory operating and reclamation requirements:

S-9 A. Given the extent of mining claims in the area, why not require the most restrictive guidelines on more than 895,000 ac, in Alternative #3?

B. How does the BLM plan to manage microscopic gold mining, if it should occur? There is no evidence in the Draft RMP of planning for this possibility, and this would be an extremely disruptive operation, environmentally. Different plans of operation and reclamation requirements will have to be developed if it occurs.

C. On whatever Alternative is picked, ACEC areas should include strictest possible plan of operations for mining on existing mining claims.

D. Serious concern remains regarding the cumulative effects of the mines, since they are not evenly spaced over the entire Arizona Strip; they're concentrated in the area unfortunately close to the Grand Canyon and the Kanab wilderness. This should be taken into account in the RMP.

E. The worst-case scenario should be addressed in the final RMP since mining companies may become less conscientious once the RMP process is completed.

VI. Our concerns over roads are:

I-2 A. There are 5,262 mi. of unpaved roads. It is not easy to control access once a new mining road is developed, therefore, <u>less</u> roads should be opened.

B. How does the BLM plan to enforce its road plans, once areas are designated?

III-23 C. "Few roads extend to the southern tier" - this is not true - see map III-23.

D. No areas should be designated as ORV areas except the two small acreages mentioned, near two communi-

05-185 (continued)

Page Ref.

ties on the Arizona Strip.

S-14 E. The impact of additional roads required for intensively managed fuel wood areas is not adequately considered.

S-19 F. Increased roads mean reduced remoteness - this should be considered in regards to mining operations, in terms of maintaining the integrity of Grand Canyon National Park.

S-23 G. Alternative #3 could better manage for remoteness.

VII. Concerns Over Riparian Areas:

A. Any riparian area should be protected through special management, as rare as these areas are in Arizona.

B. The Beaver Dam/Virgin River area riparian area is accorded protection by Alternative #3 and not by #2. It should be protected in all alternatives.

VIII. Suggestions pertaining to threatened and endangered or sensitive species:

A. ACEC boundaries and management of ACEC's may need to be altered as more information on nesting pairs of Peregrine Falcons is gathered.

B. Predator species should be protected in order to keep the natural balance of animals (such as rodents) and plants, particularly in ACEC areas.

C. Sensitive plants in riparian areas which are listed in the Arizona Natural Heritage list, and also all category two plants should be given as much protection as possible, to keep their populations from declining.

D. Any proposed surface disturbance should be reviewed by a plant specialist who has visited the area, in order to check for the existence of endangered species.

E. In order to adequately protect sensitive plants in riparian areas, threatened or endangered species and sensitive plants in riparian areas, the following practices should be incorporated into the chosen management plan: (1) vegetative manipulation should be prohibited; (2) ACEC's should be closed to mineral exploration; and (3) no surface disturbance should be allowed on fluid mineral leases.

F. Great care should be taken by the BLM to assure that areas containing T. and E. species of animals or plants are closed to O.H.V.'s including ripping and re-vegetating existing roads and trails. The Arizona Strip is large and O.H.V.'s are nearly impossible to restrict to designated roads and trails.

Representing Audubon members throughout the State of Arizona, we urge you to seriously consider the above comments in your final management plan for the Arizona Strip.



May 16, 1990

Dennis Curtis, RMP Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Re: Draft Arizona Strip District Resource Management Plan and Environmental Impact Statement

Dear Mr. Curtis:

Introductory Comments

American Rivers is a national, public interest not-for-profit corporation with more than 13,000 members nationwide. American Rivers is the only national conservation organization dedicated exclusively to the preservation of free-flowing rivers. In our seventeen-year history, American Rivers has worked intensively to protect rivers under the federal Wild and Scenic Rivers Act and has actively assisted states and local groups with their river conservation efforts.

American Rivers has worked extensively with federal agencies in planning for the river resources on the lands they administer. We have assisted the planning staff of the Bureau of Land Management ("BLM") in Washington to clarify administrative direction for consideration of potential wild and scenic rivers in BLM's resource management planning, and have reviewed, commented on, and protested numerous BLM plans. We have worked similarly with the U.S. Forest Service in developing administrative direction for the evaluation and management of potential wild and scenic rivers on the National Forests, and reviewed, commented on, and appealed numerous land and resource management plans issued by that agency.

Section 5(d) of the Wild and Scenic Rivers Act, 16 U.S.C. section 1271 et seq., requires all federal agencies to consider potential national wild, scenic and recreational river areas in all planning for the use and development of water and related land resources. 16 U.S.C. section 1276(d). The planning responsibility imposed by section 5(d) plainly requires the BLM to assess the values of potential Wild and Scenic Rivers during the preparation of resource management plans pursuant to the FLPMA. Recognizing that responsibility, BLM Manual Section 1623.41A2d identifies wild and scenic river recommendations as a possible determination to be made in such plans.

801 PENNSYLVANIA AVE., S.E.
SUITE 303
WASHINGTON, D.C. 20003
202-547-6900

To provide further guidance for fulfilling BLM's planning responsibilities for potential wild and scenic rivers, the agency's Washington office on July 23, 1987 circulated Instruction Memorandum No. 87-615, containing draft guidelines for identifying, evaluating, and protecting potential wild and scenic rivers on BLM lands. That guidance was promulgated by the Director in final form in Instruction Memorandum No. 87-670 and the attached Guidelines for Fulfilling Requirements of the Wild and Scenic Rivers Act (the "Guidelines"), issued September 8, 1988.

Under the directions established in the Guidelines, planning for potential wild and scenic rivers on BLM lands follows a relatively straightforward, three-step procedure. Each BLM resource management plan is to:

(1) evaluate the eligibility of potential wild and scenic rivers within its planning area for inclusion in the National Wild and Scenic Rivers System in accordance with the criteria set forth in Section 1(b) of the Wild and Scenic Rivers Act (i.e., whether the river is free-flowing and possesses one or more "outstandingly remarkable" values);

(2) determine the appropriate classification ("wild," "scenic," or "recreational") for rivers found to be eligible;

(3) assess the suitability of such rivers for inclusion in the national rivers system, based upon the public values and uses that would be enhanced or foreclosed by such protection, the degree of public, state and local interest in designation, and practical concerns regarding costs and feasibility of administration.

Guidelines, Section VIII, at 9-12. Until a final decision is reached by the agency and, for recommended rivers, by Congress, BLM is to protect river resource values and characteristics through specific management prescriptions established in more detailed recreation area management plans or project plans. Guidelines, Section IV.C., at p. 7, Section IX, at p. 20. As a substantive decision regarding the appropriate management of a sensitive area, the planners' decision regarding suitability must be accompanied by environmental analysis pursuant to the National Environmental Policy Act ("NEPA"). Guidelines, Section VIII.B. at p. 15-16.

In order to protect the resource values and character of its potential wild and scenic rivers until a decision is reached regarding their designation, BLM's Guidelines require agency planners to establish detailed management prescriptions. The Guidelines state: "[T]he RMP must prescribe the protection (interim management prescriptions) to be provided for the river and adjacent public land area pending the suitability and, when necessary, subsequent action by the Congress." Guidelines, Section VIII.A.3.a., at p. 11.

Specific Comments

1. Eligibility

The eligibility analysis contained in Appendix 21 demonstrates the attention and sensitivity of the planners to the eligibility of the Virgin River and Paria River for inclusion in the national rivers system. The planners have documented their conclusion that these rivers possess outstandingly remarkable values. In particular, the planners have recognized that diverse riparian habitat, which is presently rare in the planning area, provides important wildlife habitat, may be an outstandingly remarkable value which qualifies a stream for inclusion in the national rivers system. E.g., Appendix 21, A-66 et seq.; see also III-21 ("Although accounting for less than one percent of the district's land area, riparian areas are among the district's most productive and important ecosystems.").

American Rivers commends the Arizona Strip planners for evaluating the Virgin River, even though it was "delisted" from the Nationwide Rivers Inventory (NRI). See Appendix 21. A failing common to other plans is an examination of rivers only on the NRI.

However, there is no indication that other streams which flow across the Arizona Strip District were evaluated for their potential inclusion in the national rivers system.

For example, Kanab Creek possesses 12.5 miles of priority riparian area. See Table IV-3, at IV-12. Bull Run Wash possesses 9 miles of priority riparian area. Id. Pocum Wash possesses 3 miles of priority riparian area. Id. While the presence or absence of riparian habitat does not determine the eligibility of a river, it is an indicator that a stream in the desert Southwest may possess outstandingly remarkable ecological or fish and wildlife values. 1

1. In development of the draft RMP, all streams on the Arizona Strip were evaluated for their potential inclusion in the National Rivers System. As a result, the Virgin and Paria Rivers were considered eligible under the study criteria as proposed in the draft RMP.

   Natural resource managers and the planning team have reevaluated these proposals and arrived at the same conclusions. Pocum wash and Bull Rush wash, while identified as riparian areas, do not possess any outstanding remarkable values and are considered non- eligible under the Wild and Scenic River Study criteria. Kanab Creek has been impounded and diverted and was not considered eligible for inclusion into the system by a study conducted by the National Park Service. BLM has no reason to challenge nor to reconduct this study.

Additional candidate rivers may be found among those areas nominated by the planning team for ACEC consideration. For example, Fort Pierce ACEC is a large watershed the soils of which contribute salinity to the Colorado River. Appendix 6 at A-16. It possesses a dense population of the endangered pincushion cactus. Utah BLM has proposed an ACEC on adjacent lands to protect the Gila monster and two endangered plants. Id. Marble Canyon ACEC possesses a population of endangered pincushion cactus, a pincushion cactus proposed for listing, and two state sensitive plant species. A-16 -- A-17.

These values suggest that the streams which flow through the ACECs possess outstandingly remarkable ecological values which would qualify the stream for inclusion in the national rivers system. Planners sometimes overlook the fact that ecological values are a well-recognized eligibility criteria. See U.S. Departments of Interior and Agriculture, National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas ("Interagency Guidelines"), 47 Fed. Reg. 39454, 39457 ("In addition to the specific values listed in Section 1(b) of the Act, other similar values, such as ecological, if outstandingly remarkable, can justify inclusion of a river in the national rivers system.").

The planning documents include a table of "Special Status Plant Species Arizona Strip District." Appendix 29 at A-79. However, there is minimal information as to where such species are to be found in the planning area. When the planners assess the eligibility of additional rivers, serious attention should be given to the presence of such species as indicators of ecologic values. Also, Appendix 28, which identifies "Important, Endangered, Threatened or Sensitive Wildlife Species Associated with Riparian Areas" sets forth additional information of ecologic and fish and wildlife values present within stream corridors. We suggest that the eligibility assessments of the Virgin and Paria explicitly include the applicable information set forth in Appendix 28. For example, the eligibility assessment of the Virgin River does not state that the outstandingly remarkable wildlife values includes the Yellow-billed Cuckoo.

The planners must undertake a serious evaluation of the free-flowing streams in the resource area to determine whether they possess one or more outstandingly remarkable values that might qualify them for inclusion in the national rivers system. Whether a stream possesses an outstandingly remarkable value should be considered within a regional context. The Arizona Strip District includes two distinct separate physiographic provinces: the Colorado Plateau and Basin and Range provinces.



III - 3. The planners should consider outstandingly remarkable within the contexts of these two separate physiographic regions.

The failure of the Arizona Strip planners to consider all of the area's streams exposes those with high values that may be eligible for inclusion in the wild and scenic rivers system to development that can significantly degrade their values and to damming or diversion that could disqualify them for future consideration. American Rivers suggests that assessment of other rivers, streams and creeks, including tributaries and headwaters, within the Arizona Strip District, will result in the identification of other rivers, streams and creeks eligible for inclusion in the national wild and scenic rivers system.

The Final RMP should expand Appendix 21 and include a separate identifiable assessment of the various streams and their values examined by the planners.

2. Classification

The classifications set forth for the four segments of the Virgin River are sensitive to the standards set forth in administrative directive. See Appendix 21 at A-66 -- A-67.

However, the planners have not clearly identified the classification appropriate for the Paria River. The entire 28 mile segment of this river flows through the Paria Canyon - Vermillion Cliffs Wilderness Area. Presumably, the entire river qualifies for wild classification. In fact, the planners describe the area as "generally inaccessible except by trail, with shorelines essentially primitive and waters unpolluted." Appendix 21 at A-69. This description meets the statutory and administrative definition of a wild river. However, the planners state that the area meets "wild and scenic criteria," without specifying that the appropriate classification is wild, not scenic. Id. 2

3. Management Standards

In order to protect the resource values and character of its potential wild and scenic rivers until a decision is reached regarding their designation, BLM's Guidelines require agency planners to establish detailed management prescriptions. The Guidelines state: "[T]he RMP must prescribe the protection (interim management prescriptions) to be provided for the river and adjacent public land area pending the suitability and, when necessary, subsequent action by the Congress." Guidelines, Section VIII.A.3.a., at p. 11.

05-186 (continued)

2. See changes in text, page A-65. Appropriate potential classification for the Paria River is "wild" rather than wild and scenic.

05-186 (continued)

The Guidelines address in detail the scope of management prescriptions that should be adopted:

> Specific management prescriptions for river corridors identified from the NRI list, or otherwise identified for study, should provide protection in the following ways:
>
> 1. Free-flowing values. The free-flowing characteristics of such identified river segments cannot be modified to allow stream impoundments, diversions, channelization, and/or rip-rapping to the extent the BLM is authorized under law.
>
> 2. River values. Outstandingly remarkable values of the identified river segment or area must be protected (subject to valid existing rights) and, to the extent practicable, enhanced.
>
> 3. Classification impacts. Management and development of the identified river and its corridor cannot be modified, subject to valid existing rights, to the degree that its eligibility or classification would be affected (i.e., its classification cannot be changed from wild to scenic, or scenic to recreational).

Guidelines, IX, B., at 1-20.

The Arizona Strip District RMP fails to include any specific prescriptions and thereby fails to comply with agency directive. It is insufficient merely to recite that "potential classifications as determined in this document [will] be considered when an action is proposed that may affect these classifications." E.g., Appendix 21 at A-69. The planners must set forth particular detailed prescriptions appropriate to the particular classification. 3

For example, the Virgin River has been found to be eligible, yet the Alterative 2 (Preferred Alternative) would provide for merely a "slight improve[ment]" for the riparian river corridor rather than the "improve[ment]" which would result from implementation of Alternative 3. See IV-12. American Rivers suspects that management standards appropriate to protect the important riparian habitat would result in an improvement rather than a slight improvement of the riparian condition.

The Draft Three Rivers RMP recently issued in Oregon contains management prescriptions that are consistent with the BLM Guidelines and will provide appropriate guidance to BLM and the public of those actions that are appropriate within the relevant

3. Interim management described in the RMP is designed to protect the stream proposed for inclusion in the National Rivers System or for the stream proposed for further study. This management guidance is considered adequate pending development of more specific management prescriptions that would be developed in a river management plan following official designation. These plans would be subject to the NEPA process, an EA with public involvement would be prepared.

05-186 (continued)

river corridor. American Rivers suggests that the Arizona Strip planners consult with the Three Rivers planners on this issue.

4. Preferred Alternative and Suitability Determination

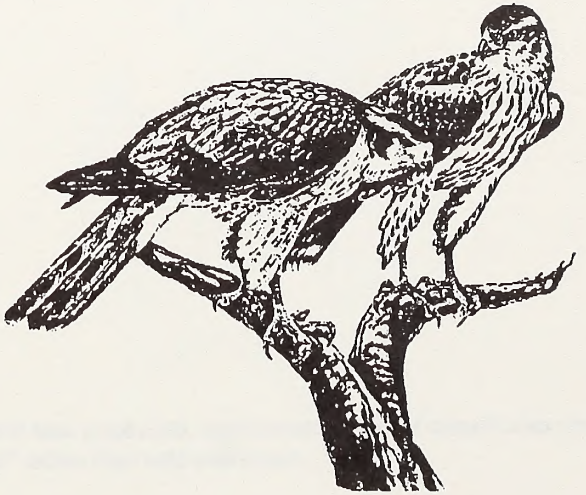
American Rivers commends the Arizona Strip planners for the decision to find suitable the 28 mile segment of the Paria River. We look forward to completion of the suitability study of the Virgin River in the near future.

We trust these comments are helpful during the Resource Management Plan process. We look forward to participating further in the RMP process. If you have any questions concerning any of the matters set forth above, please do not hesitate to communicate with me.

Sincerely,

Thomas J. Cassidy, Jr.
Public Lands Counsel

cc: Gary Marsh, BLM, Washington
David Wickstrom, BLM, Washington



05-187

Stephen M. Williams
4575 North 17th Avenue
Phoenix, Arizona 85015

May 18, 1990

Mr. Dennis Curtis, Team Leader
Arizona Strip District
Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

V-261

RE: ARIZONA STRIP DRAFT RESOURCE MANAGEMENT PLAN
AND ENVIRONMENTAL IMPACT STATEMENT

Dear Mr. Curtis:

I have reviewed the above referenced document. As a turkey hunter in the Mount Logan area for the past seven years and a bighorn sheep enthusiast there are concerns I have about portions of this document. Please accept my comments as part of the official public record.

MINERAL RESOURCES
OIL AND GAS LEASING -

I support the restriction on these leases to protect desert bighorn sheep, but do not feel comfortable making a choice between Alternative 2 and Alternative 3. The maps are not detailed enough to enable me to determine which would be the best alternative to protect bighorn.

FOREST/WOODLAND RESOURCES
DESIGNATIONS -

Management Category C (forest management for the enhancement of other uses) is introduced in this portion of the plan and not mentioned anywhere else. A more detailed explanation of this management category is needed. 1

1. Under management Category C, an active, carefully designed long-range program will be implemented directed toward managing, maintaining and protecting ponderosa pine forest ecosystems. Management direction would be to maintain healthy, viable and biologically diverse forest ecosystems that will meet the long-term needs of wildlife, recreation, livestock grazing, watershed protection and other associated resource uses. Commercial forestry or harvest are not objectives because of the importance of these forests to diverse multiple uses. Additional inventory work is necessary in developing a management program for the ponderosa pine areas. Specific criteria, objectives and planned actions would be determined as part of plan development for the Mt. Trumbull and Parashant Resource Conservation areas.

05-187 (continued)

Dennis Curtis
May 18, 1990

Page 2

MANAGEMENT DIRECTION -

Alternative 4 is unacceptable and should not be implemented. There are basic questions which need to be answered before any timber harvest is considered in the Uinkaret Mountains and the Parashant, even those considered under Alternatives 2 and 3.

Those questions are:

1) What is the boundary within which commercial and selective thinning of ponderosa pine is to occur in these areas?

2) Is there adequate documentation that silvicultural stand examinations did occur? Can federally mandated commercial pine regeneration standards be met if ponderosa pine is harvested or selectively thinned?

3) Is there adequate soils mapping to discern any sensitive areas which should not be cut commercially or thinned?

4) Is there a sufficient wildlife inventory for state or federally listed species to ever allow the harvest or thinning of ponderosa pine?

The draft RMP does not make a clear and convincing case regarding the need to harvest ponderosa pine in the Uinkaret Mountains and the Parashant. You should provide more background about the perceived need.

WILDLIFE RESOURCES
BIGHORN SHEEP NUMBERS -

I question how you arrived at the planned number of bighorn sheep in Alternatives 1, 2 and 4. In the case of the Virgin Mountains the existing numbers already exceed the planned number by 25-50.



05-187 (continued)

The preferred alternative discusses adjusting to "optimum numbers." This term is not defined anywhere in the document. I feel the bighorn sheep should be managed to maximize the population consistent with habitat capability. 2

It is important to retain the ability to supplement existing bighorn populations. This management tool can benefit declining or failing populations.

CHANGES IN KIND OF LIVESTOCK -

I agree with the intent of the preferred alterative but am unclear what the relationship of the monitoring and research is to a change in class of livestock. Are these actions to take place on the allotment in question before the change is made? Or, does the change in class occur before the monitoring and research commence? This needs clarification. 3

LAMBING ACTIVITIES -

I support limiting activities which could adversely affect the lambing and rearing of newborn bighorn lambs not just along the lower Grand Wash Cliffs, but in all Arizona Strip bighorn sheep populations.

RECREATION RESOURCES
OHV DESIGNATIONS -

The designation of the different categories of OHV use areas needs clarification. The maps (II-24, 25 and 26) are so general the boundaries are difficult to understand. Identification of specific road segments in each category would be more helpful than identifying acres to which the category applies.

2. Optimum numbers is an appropriate objective in public land management, multiple use settings. It reflects the intent to manage for the most favorable population of bighorn sheep according to reproductive and habitat capability, mortality factors and other related considerations.

3. Changes in class of livestock involve monitoring studies on the allotment. Monitoring studies are currently on all allotments, with the exception of small isolated tracts (40 acres) in private land. Prior to allowing a change of livestock, an evaluation is done from monitoring studies and then an EA is done on the proposed change. If the action is found unacceptable to resources on the land, it won't be approved. If found otherwise, the change would proceed.

05-187 (continued)

Dennis Curtis
May 18, 1990

Page 4

TRANSPORTATION/ACCESS
EXISTING ROADS -

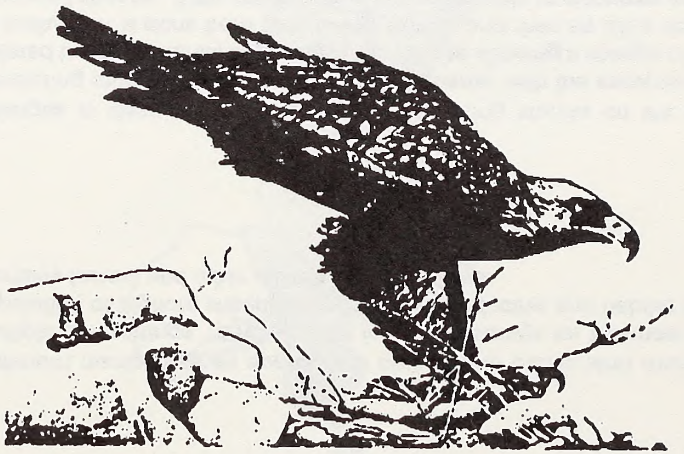
I am not comfortable with closure of existing roads where no public or administrative need exists unless I know what criteria are used to make the determinations and who made them. Neither of those additional pieces of information is provided in this document.

Thank you for the opportunity to comment on this plan.

Sincerely,

Stephen M. Williams

Stephen M. Williams



April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Thereal Thompson
Box 217
Colorado City, Az 86021

V-265

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Box 217
Colorado city, Az 86021

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple use as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Mary Impson
365 W. Johnson Ave.
Box 217
Colorado City Arizona
56021

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Rose Simpson
Box 217
Colorado City, Arizona
86021

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Newel Timpson

Box 217
Colorado City, AZ
86021

V-267

May 9, 1990

Mr. Dennis Curtis
Bureau Of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

It seems that more and more people are trying to take lands away from the majority who need them and give them to the minority who want them. I think that we need to distinguish between desires and needs. We all have to do that with our own finances. It is time to do this when it comes to determining the management methods of our public lands.

A large portion of the lands proposed for additional restrictive management are the same lands recently studied and released from wilderness designation. Congress decided that these lands should be returned to multiple use. However, the Resource Management Plan's new restrictions on these lands would, for all practical purposes, make them wilderness areas. I guess it shows how well federal and state government works together.

Alternatives 2 & 3 go overboard in setting aside excessive wilderness area. I support alternative 4. By adopting this plan, we could still have some land available for multiple use. We need to use these resources, they are critical to our survival in this area.

Thank you

Beverley Timpson

Box 217
Colorado City AZ 86021

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Ledema Simpson
Box 217
Colorado City, Arizona
86021

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Christene Simpson
Box 217
Colorado City, Arizona
86021

05-196

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Kris Anthony Dolce
Colorado City, Arizona
P.O. Box 217 86021

V-269

05-197

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Donna Simpson
Box 217
Colorado City, Arizona
86021

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparentiy feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Guinevere Simpson
Box 217
Colorado City Ariz. 86021

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Hubert Simpson
Box 217
Colorado City, Ariz.
86021

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Ruth Simpson
Box 217
Colorado City, Az. 86021

V-271

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Thurl Timpson
Box 217
Colorado City, Ariz.
86021

05-202

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Lydia Timpson
365 W. Johnson Ave.
Colorado City, Ariz. 86021

05-203

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Rachel Timpson
Box 211
Colorado City, Az 86021

05-204

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

V-273

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Marie Simpson
365 W. Johnson Ave
Colorado City, AZ 86021

05-205

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Marie Simpson
P.O. Box 217
Colo. City,
AZ.
86021

05-206

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Robert Timpson
Box 217
Colorado City, Az 86021

05-207

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Jacob Timpson
365 W. Johnson Ave
Colorado City, Az 86021

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Jonathan Simpson

365 W Johnson Ave
Colorado City, AZ 86021
P.O. 217

V-275

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has been able to provide many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Thomas Simpson

365 W Johnson Ave
Colorado City, Az 86021
P.O. 217

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Jean Timpson

365 W Johnson Ave
Colorado City AZ.
P.O. BOX 761

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Jean Timpson

365 W Johnson Ave
Colorado City, AZ 86021

Box 154

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Benjamin Simpson
Box 217
Colorado City Ariz 86021

V-277

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Franklin Simpson
365 W. Johnson Ave
Colorado City, AZ
86021

May 9, 1990

Mr. Dennis Curtis
Bureau Of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

It seems that more and more people are trying to take lands away from the majority who need them and give them to the minority who want them. I think that we need to distinguish between desires and needs. We all have to do that with our own finances. It is time to do this when it comes to determining the management methods of our public lands.

A large portion of the lands proposed for additional restrictive management are the same lands recently studied and released from wilderness designation. Congress decided that these lands should be returned to multiple use. However, the Resource Management Plan's new restrictions on these lands would, for all practical purposes, make them wilderness areas. I guess it shows how well federal and state government works together.

Alternatives 2 & 3 go overboard in setting aside excessive wilderness area. I support alternative 4. By adopting this plan, we could still have some land available for multiple use. We need to use these resources, they are critical to our survival in this area.

Thank you

Box 217
Coloradocity
Az. 86021

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

365 W Johnson Ave
Colorado City Ariz
86021

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has been able to provide many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Jacob Hamblin

365 W. Johnson Av.
Colorado City, Az.
86021

V-279

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Marion Simpson

Box 217
Colorado City, Arig.
86021

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Susie Simpson
P.O. Box 217
Colo. City, Az.
86021

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Helen Timpson
Box 58
Colorado City · Az
86021

05-220

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Daniel Timpson
Box 58
Colorado City, Az.
86021

V-281

05-221

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Theral Ray Timpson
Box 58
Colorado City, Az.
86021

05-222

May 9, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I feel that it could be detrimental to us in this area if Alternatives 2 or 3 are adopted from the RMP draft of the Arizona Strip. Thus, I feel that adopting Alternative 4 is the only answer.

In our area there are more of our lands owned and operated by the federal governement than in many places. A large portion of the Strip such as the 265,000 acres of wildness, is already off limits to multiple use. We need to increase rather than decrease opportunities for economic development in this region.

It is inconsistent with our needs to have more of these lands taken away from us. This region needs to continue as a multiple use area. We don't need to tie it up into more wilderness. There are already more places available for this type of people than they can possibly enjoy. You need to take into consideration the needs of us, the people in this area. The loss of these resources would be irreplaceable.

Sincerely,

Jeanetta Anne Timpson
Box 58
Colorado City, Az
86021

05-223

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of all resources.

Thank you for the opportunity to express my views.

Sincerely,

Joseph D. Timpson
Box 58
Colorado City, Az 86021

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Donna Simpson
P.O. Box 58
Colo. City, Az.
86021

V-283

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has been able to provide many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Donna Simpson
P.O. Box 58
Colo. City, Az
86021

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Keller Simpson
P.O. Box 58
Colo. City, Ariz.
86021

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Jack Simpson
P.O. Box 58
Colo. City, Ariz.
86021

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

Thomas Simpson
P.O. Box 58
Colo. City, Az.
86001

V-285

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Marcia Simpson
P.O. Box 58
Colo. City, Az.
86001

05-230

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Sharon Simpson
P.O. Box 58
Colo. City, Az.
86021

05-231

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Karen Darger
P.B. 58
Colorado City, Az
86021

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Michelle Simpson
P.O. Box 58
Colo. City, Az. 86021

V-287

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has been able to provide many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Heather Stubbs
P.O. Box 58
Colo. City, Az. 86021

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Jessikah T. Cantley
245 S Carling
Colorado City, Az
86021

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

P.O. Box 58
Ray Simpson - Colo. City, Az.

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Edward D. Carell
P.O. Box 247
Colorado City Az -

V-289

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Jessica Simpson
#4 S. Cooling St
Colorado City Az 86021

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. LooKing at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Artemisia Cawley
P.C. BOX 249
Colorado City, Az.

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Yvonne Hammon P.O. Box 208 Colorado city, Az. 86021

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Elaine L. Barlow
P.O. Box 338
Hildale, UT 84784

V-291

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Valiant Y. Barlow
P.O. Box 333
Colorado City, AZ 86021

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Box 217
Colorado City, Az.
86021

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Joshua Timpson
P.O. Box 61
Colo. Cy., Az.
86021

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Margaret Simpson

P.O. Box 61

Colorado City, Arizona

86021

V-293

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has been able to provide many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Margaret Simpson

Box 61

Colo City AZ. 86021

May 9, 1990

Mr. Dennis Curtis
Bureau Of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

It seems that more and more people are trying to take lands away from the majority who need them and give them to the minority who want them. I think that we need to distinguish between desires and needs. We all have to do that with our own finances. It is time to do this when it comes to determining the management methods of our public lands.

A large portion of the lands proposed for additional restrictive management are the same lands recently studied and released from wilderness designation. Congress decided that these lands should be returned to multiple use. However, the Resource Management Plan's new restrictions on these lands would, for all practical purposes, make them wilderness areas. I guess it shows how well federal and state government works together.

Alternatives 2 & 3 go overboard in setting aside excessive wilderness area. I support alternative 4. By adopting this plan, we could still have some land available for multiple use. We need to use these resources, they are critical to our survival in this area.

Thank you

Louise Dutson
P.O. Box 432
Hildale, Ut. 84784

May 12, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Marie Hammon
Gen. Delivery
Colorado City Ariz. 86021

May 11, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin.

Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

John Lo Simpson
Box 61
Cala City
Az 86021

V-295

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in the area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulation proposed in the RMP will adversely affect local communities. Existing federal restrictions imposed throughout the region and the relatively limited private land available to us leaves us extremely sensitive to any further federal restrictions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Duane Simpson
Box 61
Cala City AZ
86021

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Ruth Tompson
Box 41.
Colo City AZ

May 8, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

It is not necessary to set aside more of our economically producing public lands in order to assure that some of our land will remain remote. This area has not been over developed nor over used during the past. Areas for remoteness activities will continue to be available to us.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Allen Tompson
120 W Johnson Ave
Colo City
AZ 86021

05-252

April 2, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip District. The draft RMP does not adequately emphasize the critical role that multiple use of public lands plays in the local economies in Northern Arizona and Southern Utah. The commercial activities, particularly uranium mining, that occur on public land in the District have a beneficial impact for all residents of the region. Because there is so little private land in the area we need to see that no unnecessary restrictions are placed on the development of such lands. Federal law requires BLM to consider present and potential uses of the public lands in its land use plans. The draft RMP's proposed land use restrictions will significantly reduce the potential of the Arizona Strip District to sustain a complete range of commercial land uses.

We have recently seen the creation of dozens of wilderness areas and wilderness study areas and the expansion of increasingly restrictive management of the national parks and national recreation areas. This has made management for multiple use of remaining public lands essential. The Arizona Wilderness Act returned to multiple use the majority of the areas the RMP now proposes for restrictive management. I urge you not to place additional restrictions on such use. I favor the elimination of "Guideline area B" and the adoption of alternative [1 or 4].

Where restrictions on commercial development are proposed, I encourage you to affirmatively state that BLM's intention is not to preclude multiple use, particularly properly regulated mineral development. There should be no question that BLM's intentions are not to create, in the name of "remoteness", de facto wilderness areas.

Sincerely,

Samuel Tempas
120 W. Johnson Ave
Colo City AZ 86021

V-297

05-253

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. I believe it is the best method for management of these public lands.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is no any shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

Robert Tempas
Box 61
Colo City
AZ 86021

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple us as much as possible. The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturallsts happy.

After reviewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Leanne Simpson
Cedar City
Utah
c/o Box 61
Colo City
Ariz 86021

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of <u>all</u> resources.

Thank you for the opportunity to express my views.

Sincerely,
Elizabeth Simpson
P.O. Box 217
Colo. City, Az. 86021

energy fuels nuclear, inc.

one tabor center • suite 2500
1200 seventeenth street • denver, colorado 80202

(303) 623-8317
twx 910-931-2561
fax 303-595-0930

May 18, 1990

G. William Lamb
Arizona Strip District Manager
U.S. Department of the Interior
Bureau of Land Management
Arizona Strip District Office
390 North 3050 East
St. George, Utah 84770

Re: Comments on the Arizona Strip District Draft Resource Management Plan and Environmental Impact Statement

Dear Mr. Lamb:

This letter provides the comments of Energy Fuels Nuclear, Inc. ("EFN") on the Draft Resource Management Plan and Environmental Impact Statement ("RMP/EIS") for the Arizona Strip District. As you know, EFN has been actively engaged in uranium exploration and mining activities within the Arizona Strip for the past 10 years. Because of our interest in the unique mineral resources which occur in the Arizona Strip, we are vitally interested in the decisions which are made concerning the future management of this important area. During the planning process, EFN has provided continuing input to the Bureau of Land Management ("BLM") through participation in scoping as well as through submittal of substantial data and information, including information on the unique mineral potential of the area and monitoring information on both air and water quality in the District.

The past 10 years under your leadership have demonstrated the commitment of the BLM to good stewardship and sound public land management. The resources of the Arizona Strip have been managed in ways that have accommodated the needs of the many and varied users of the public, lands while at the same time insuring that the sensitive environment of the District has not been adversely impacted. In our view, if all of the BLM Districts approached the public lands with the dedication and sensitivity of the Arizona Strip District, the massive commitment of taxpayer dollars which are being spent on RMP's would not be necessary to insure that the public lands are managed responsibly. Importantly, one of the reasons that the District has been so successful in accommodating the competing interests on the Arizona Strip is that the local communities and users of the Arizona Strip have been actively involved and concerned with the public lands deci-

V-299

sions which have been made, and the District has been responsive to those local public concerns.

The RMP/EIS is a well written and organized document which can form the basis for a sound and meaningful final Resource Management Plan which the BLM and the public can successfully operate under during the next planning cycle. However, as the BLM proceeds to evaluate the public comments on the RMP/EIS it should be mindful of its mandate under Section 202(c) of the Federal Land Policy and Management Act ("FLPMA") to "use and observe principles of multiple use and sustained yield set forth in this and other applicable law" in the development of the RMP. To remain viable and to prosper, the local communities and businesses depend heavily on free and open access to the public lands. Such access can only be assured by the adoption of a final Resource Management Plan which emphasizes multiple use, recognizes the need for flexibility and agency discretion, and minimizes prescriptions which favor single uses of the public lands.

Our comments on the RMP/EIS will be divided into parts -- comments of general applicability and comments on specific sections of the RMP/EIS.

GENERAL COMMENTS

1. BLM's Fundamental Focus On Preserving "Remoteness" Is Inappropriate.

The text of the RMP/EIS and the range of new Alternatives dramatically overemphasizes management for "remoteness," which it defines as "recreation experience opportunities in backcountry, natural-appearing settings." (page S-19) BLM's view, apparently, is that BLM must impose restrictions on multiple use to preserve the remote character of the region. Accordingly, it proposes to create Areas of Critical Environmental Concern ("ACECs"), Special Recreation Management Areas ("SRMAs"), Resource Conservation Areas ("RCAs"), Off-Highway Vehicle ("OHV") Designations, and the like, and proposes to impose a number of significant prescriptions on multiple use based on the assumption that such actions are necessary to preserve remoteness. Viewing the District in its regional context, however, these proposed actions are unnecessary and inappropriate.

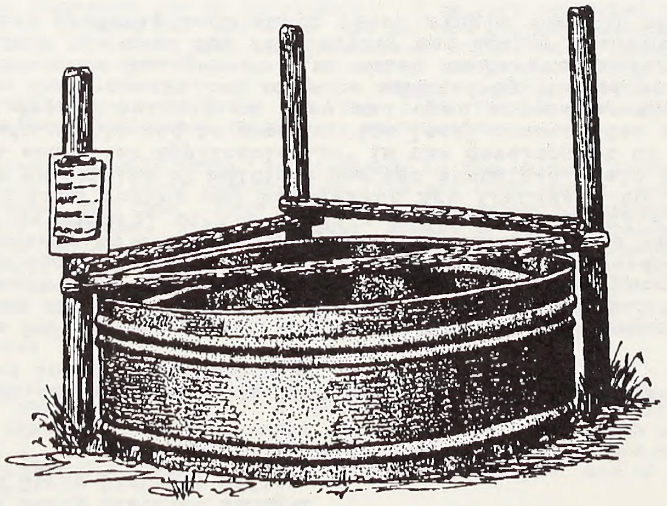
The land within the District is, and without any action by BLM, will remain throughout this planning cycle, fundamentally remote. It will remain remote due both to its location and its relative lack of improved roads (only 140 miles of paved roads,

05-256 (continued)

G. William Lamb
Arizona Strip District Manager
Arizona Strip-District Office
May 18, 1990
Page 3

all along the edge of the District), relative lack of inhabitants and limited development infrastructure. Development of the District is constrained by the relatively limited amount of private land available (less than 5% of the District) and, particularly, its proximity to other federally protected areas (e.g., Grand Canyon National Park, Grand Canyon National Game Preserve, Lake Mead National Recreation Area, Zion National Park, Glen Canyon National Recreation Area, Beaver Dam Mountains Wilderness, Paiute Wilderness, Grand Wash Cliffs Wilderness, Mt. Trumbull Wilderness, Cottonwood Point Wilderness, Paria Canyon-Vermillion Cliffs Wilderness, Mt. Logan Wilderness, Kanab Creek Wilderness, Saddle Mountain Wilderness, Mt. Wilson Wilderness, Mt. Tipton Wilderness, Mt. Nutt Wilderness, more than 600,000 acres of Wilderness Study Areas, Bryce Canyon National Monument, Cedar Break National Monument) and its proximity to indian lands (the Kaibab Paiute, Navajo, Moapa, Shivwits, Havasupai and Hualapai reservations). These federal and indian lands are essentially unavailable for commercial development. The enclosed regional map, entitled "No. Arizona/So. Utah Land Map," demonstrates in graphic form the true extent of protected status lands within the region. If this map illustrates anything, it is that within this region of the west, the only lands which are still available for multiple use management are contained within the District and the Kaibab National Forest. Given this undeniable fact, justifying limited land use or management restrictions on the basis of preservation of remoteness is unreasonable.

Existing environmental regulation (e.g., protection of endangered plant and animal species such as the desert tortoise or protection of cultural resources, non-degradation of adjacent Class I air quality, etc.) also imposes significant constraints on development within the District. Various natural characteristics of the area (rugged terrain, deep canyons, lack of developable ground or surface water, etc.), are significant limiting features. Finally, and most significantly, there is a glaring lack of development proposals pending before the BLM that would result in significant changes during this planning cycle. Collectively, these factors have effectively prevented development of the District and will ensure that the vast majority of lands in the District remain remote for the foreseeable future. Indeed, there is no basis to suggest that the basic "remoteness" of the area is presently threatened in any respect. BLM does not need to impose additional restrictions on the limited public land that is not already managed as a National Park, National Recreation Area, National Monument, or Wilderness Area, to preserve the remote character of the area.



05-256 (continued)

BLM's narrow focus on the only public lands in the area that remain subject to multiple use results in a distorted picture of appropriate management goals. It is not appropriate to look at the need for backcountry recreation in the District in isolation. If one looks at the "regional" picture, it is clear that within southern Nevada, southern Utah and Arizona (north of Grand Canyon) there are far more opportunities for the public to experience "remoteness" on public lands than for all other significant competing uses of the public lands combined. Natural conditions, land ownership, existing federal regulation and the lack of demand for any commercial development ensure that the basic character of the entire region is, and throughout the planning cycle will remain, "remote." Within the immediate region, literally millions of acres have already been restricted in one way or another (e.g., National Parks and Recreation Areas, Wilderness Areas, etc.) from competing uses to promote backcountry recreation. There is no evidence that the foreseeable demand for backcountry recreation will ever approach the backcountry recreation capacity of previously restricted lands. Consequently, the additional regulation presently proposed is not necessary to preserve the opportunity to experience "remoteness" throughout either the region or the District. 1

2. <u>The "Need" for Multiple Restrictions Affecting Multiple Use Has Not Been Established</u>.

The RMP/EIS does not support the conclusion that a collection of management prescriptions affecting large areas are necessary to remedy any specific problems identified in the RMP/EIS. The collective impact of the proposed management prescriptions (e.g., OHV restrictions, ROS classifications, VRM classifications, mineral withdrawals, NSO stipulations, "special mitigation" stipulations, ACEC, SRMA and RCA designations, etc.) on multiple use of the District will be substantial. There is little evidence that such classifications and prescriptions must be imposed on an area-wide basis to protect any resource and could not be properly addressed on a more selective site specific basis as development proposals (which presently are conspicuously lacking) emerge. Many of the values that BLM seeks to protect (other than "remoteness") are already directly protected by federal wildlife, cultural resources or surface management laws and regulations. The impact of additional prescriptions affecting an "area" (as opposed to the specific resource if, when and where it occurs) may be to categorically eliminate or impede other public uses without a site specific analysis of whether such regulation is necessary or appropriate. That is not efficient use of resources nor is it good public land management policy. Indeed, elimination of categories of uses on an "area-

1. This planning effort is appropriately focused on the public lands administered by the BLM on the Arizona Strip District but in analyzing proposed programs and decisions pertinent regional considerations were factored in, including the abundant recreational opportunities in the surrounding area. However, the Arizona Strip provide vehicle exploration because of the abundant roads and limited restrictions on camping. Recreation is one of the many multiple uses available on public land. Managing for protection and enhancement in harmony with other uses meets the bureau's multiple use mandate.

wide" basis, without regard for the compatibility of a specific proposed use and the protected resource, does not fulfill BLM's obligation to manage for multiple use.

Where the RMP/EIS does identify specific activities and environmental impacts that may warrant attention, it also frequently demonstrates that many such impacts are temporary and that further regulation is unnecessary. For example, the impacts attributable to uranium exploration and mining in the District have been shown to be manageable and temporary when properly regulated by BLM. Yet, Alternatives 2 and 3 propose withdrawals and protective stipulations for 613,000 and 895,000 acres, respectively, to "minimize adverse effects of mineral operations." (See pages S-9 & 10.) Existing management has been demonstrated to be adequate within the District to minimize or avoid problems associated with the type of exploration and mining that is foreseeable in the District. Consequently, the need for "area-wide" prescriptions on use has not been demonstrated. Prescriptions on multiple use should only be imposed if and where the specific need is clearly established and then only on a case by case basis.

3. The EIS Understates the Collective Impact of Multiple Prescriptions on Multiple Use.

While each individual land use prescription may not appear to have an adverse impact on opportunities for multiple use, there are many instances where several such prescriptions may be applied simultaneously. For example, the collective impact of land use regulation to protect "scenic vistas" (VRM classifications) and opportunities for primitive recreation (ROS classifications) may create significant uncertainty and may impose substantial costs for public land users and potential public land users, and eliminate opportunities to take maximum advantage of the resources of the District. Such prescriptions must be viewed together with proposed OHV limitations, stipulations to protect wildlife, cultural resources and other values, and existing environmental regulation. Chapter IV of the RMP/EIS examines impacts only in the context of a single resource. Thus, the collective impacts of such prescriptions are not identified or are dramatically understated throughout the RMP/EIS. 2

The similarity of the lands proposed for restrictive management to lands recently studied for and released from wilderness designation is apparent. Congress determined that these lands should be returned to multiple use. However, the impact of the collection of open-ended prescriptions may not, as a practical matter, be distinguishable from wilderness designa-

05-256 (continued)

2. The collective impacts of each alternative are summarized in the conclusion statement of each resource analyzed in Chapter IV. The analysis has been strengthened to more clearly reflect the impacts of the various management prescriptions, see changes in text.

05-256 (continued)

G. William Lamb
Arizona Strip District Manager
Arizona Strip District Office
May 18, 1990

tion. For mineral development, the collective impact of such restrictions may not, as a practical matter, be distinguishable from a withdrawal. While we do not believe that this is the intention of the BLM, we are concerned that, without significant clarification in the final RMP, many of the prescriptions, taken out of context, may be pointed to as justification for preventing or severely restricting appropriate activities, such as mineral exploration and development or grazing. Congress has established processes for wilderness designations and withdrawal actions. It chose not to designate or withdraw these areas. Much of the local and national support for the wilderness legislation was premised on the release of such lands for multiple use. BLM should not now propose to do what Congress chose not to do. 3

4. The District's Mineral Potential Is Underemphasized.

V-303

The RMP/EIS fails to give adequate attention to the mineral potential of the District. While noting that the hard rock mineral potential of the District is high (Table III-5), that earnings from employment in the local mining industry is higher than any other sectors of employment (Table III-31), and that reclamation of mines in the District has been successful, BLM fails to take steps to maximize the opportunity of the public to explore for and develop the District's significant mineral resources.

The RMP/EIS correctly notes that "breccia pipes" which may contain high grade uranium deposits are "unique to this portion of the Colorado Plateau." Such deposits are among the richest (in terms of ore grade) in the country, and, as noted in the RMP/EIS, can be fully developed and reclaimed in a relatively short period of time with an average surface disturbance of only 17 acres (See page III-8). The RMP/EIS notes that there are only limited short term environmental impacts associated with their development. These are resources of national significance. The development of such minerals have a significant beneficial impact on the economies of local communities. It should be a priority of BLM to manage the District in a manner to assure public access to such resources.

The "Guideline B Area" which is to receive restrictive management to promote recreation appears to directly conflict with existing mines in the District and (based upon Maps III-46 and 47) directly conflicts with areas of prospective mineralization. Backcountry recreational opportunities are common throughout not just the District, but the entire region; however, significant deposits of minerals such as those found in the breccia pipes are not. At least one of the primary alternatives con- 4

3. One of the primary objectives of the RMP is to manage the public lands for multiple use, mineral development is considered one of these uses. Another objective is to encourage the orderly development of mineral resources, see page II-10. Statements have been added to Table IV-1 and II-2 indicating the areas open to mineral location and development.

4. BLM is directed by the FLPMA to manage public lands in a manner which recognizes the nation's need for domestic sources of minerals, food, timber and fiber from the public land. Furthermore, it is BLM policy to encourage and facilitate private industry in the development of mineral resources on the public lands in a manner which satisfies the local needs and provides for economically and environmentally sound exploration, extraction and reclamation practices.

G. William Lamb
Arizona Strip District Manager
Arizona Strip District Office
May 18, 1990
Page 7

sidered in the RMP/EIS should have emphasized the management of the District to promote the orderly exploration and development of such resources. | 4

5. The Distinction Between Area A and Area B is Unclear.

Throughout the RMP/EIS references are made to Area A and Area B, with particular emphasis in places to "management guidelines" for Area B, the implication being that activities within Area B may be subject to special restrictions, special stipulations or other limitations. However, no where in the RMP/EIS is there a clear statement of the distinction between Area A and Area B, nor is there any description of the reason for the distinction between the two areas from a management perspective. Indeed, the only reference to the distinction between the two Areas is found at S-2 where it states that these two Areas "have been identified to guide management initiatives." However, in the brief definitions provided for Area A and Area B, the RMP/EIS states that multiple use would be the central management feature in both areas. Consequently, it is not possible to determine whether or not activities proposed within Area A or Area B will or will not be subject to different management prescriptions, and if so, which ones and why. For example, the RMP/EIS repeatedly refers to "management guidelines" for "Area B" and yet a careful review of the text of the RMP/EIS discloses only the briefest of descriptions of these guidelines. It is not possible to determine whether the guidelines will be unduly restrictive, nor is it possible to provide meaningful comment on such guidelines until they are identified. It appears that the distinction between Area A and Area B under each Alternative was used by the BLM to provide focus for the interdisciplinary team as it analyzed the various issues and concerns identified during the scoping process. To this end, we believe that the distinction probably was helpful. However, once those issues were identified and considered, we believe the distinction ceases to be useful. Indeed, in the final RMP retention of the distinction may serve to confuse rather than enlighten. Consequently, we recommend that the distinction between Area A and Area B be abandoned in the final RMP. However, should the BLM choose to retain the distinction, the implications to multiple use activities such as mining should be clearly described and the public given an opportunity to comment upon those implications. | 5 | 6

6. Management Prescriptions will Adversely Impact Local Communities.

Proposed management prescriptions will adversely affect important segments of the public, particularly local communities.

This direction is reflected in all the alternatives presented in the draft RMP/EIS. The alternatives presented reflect a range of alternatives which are viable, reasonable and reflect the above requirements and bureau policy.

5. The area A and B concept was developed to guide the RMP planning process. This concept recognizes that there are areas with special resource values or that are fragile in nature due to their physical characteristics. The concept also recognizes that some areas may need special management considerations and not warrant a special designation. The resource descriptions found in chapter III plus a topographic map could be used to identify the differences between area A and B. How these guidelines affected the proposed RMP decisions is explained on page II-3 of this document.

6. The guidelines for area A and B were used to focus the proposed RMP decisions and ensure consistent management in specific geographic areas. Their influence is reflected in the various resource program decisions displayed in Table II-1 and Table II-2. Since areas A and B were not intended to be a special designation, there are no restrictions tied directly to them. All the RMP decisions are either displayed by program in Table II-1 or as a management prescription for a special designation in Table II-2.

05-256 (continued)

As a result of existing federal restrictions imposed throughout the region and the relatively limited private land in the region, the communities contained within or located very near the District are extremely sensitive to further federal restrictions on the use of the limited land which is not either within an indian reservation or designated for some form of restrictive management by BLM, the Forest Service or the National Park Service.

Communities in or near the District are relatively far removed from the regional economic hubs. As a consequence, they must largely depend on local industry for their economic sustenance. However, less than 5% of the land in the District is private and only a portion of that land is available for or susceptible to economic development. The local communities most affected, e.g., Fredonia, Page, Colorado City, Hildale, Kanab, Hurricane, Mesquite, Washington and Littlefield necessarily depend upon the continuation of multiple use of BLM administered public land to sustain their economic base. In the last 10 years, however, the region has experienced a dramatic change in management direction of federal lands. Substantial areas have been designated as wilderness and much more is presently under study for inclusion within the National Wilderness Preservation System, restrictions on activities within the National Parks have continued to increase, and a "zoning" approach to many resource values has become increasingly prevalent as environmental advocates have succeeded in limiting multiple use activities on the grounds that such activities are inconsistent with special values such as cultural resources, recreation, scenic vistas and the like. The local climate for commercial activities that depend upon BLM administered lands already is increasingly harsh. Many local industries such as mining and ranching appear to be operating on the margin. BLM regulation that further restricts the opportunities for commercial activities on the remaining public lands or which further increase the costs to commercial activities should occur only where specific circumstances clearly demand such regulation.

SPECIFIC COMMENTS

1. Mining Issues Common to All Alternatives.

The data, information and analysis presented in the RMP/EIS makes clear that the uranium mining activities which have been occurring in the District over the past 10 years have had no long term impacts on the environment due to the mitigations imposed and the reclamation which has been implemented. The final EIS and the RMP should be changed to more clearly state this fact so that it is clear that regardless of the Alternative 7

7. See comment responses 04-26-03 and 05-275-03.

G. William Lamb
Arizona Strip District Manager
Arizona Strip District Office
May 18, 1990

selected, uranium exploration and mining will be encouraged throughout the District. At each place in the RMP/EIS that special values are recognized and special management prescriptions are identified, the BLM should emphasize that notwithstanding these special values or prescriptions, it is anticipated that uranium exploration and mining activities will continue to be authorized so long as those activities proceed in substantially the same manner as the mining activities that have occurred during the past 10 years. If the BLM elects to retain the distinction between Area A and Area B in the final RMP/EIS, it is vitally important that it is clear that mining activities proposed to occur within Area B which are substantially similar to past mining activities will be consistent with the sensitivities and values sought to be protected by the designation of Area B. Similarly, if the BLM elects to designate SRMAs, RCAs, or ACECs in the final RMP/EIS, a similar statement relating to future mining proposals should be made to insure that no confusion or misunderstanding exists concerning the appropriateness and compatibility of exploration and mining activities in these special management areas. | 7

At page II-5 of the RMP/EIS the statement is made that "In order to insure minimal mining impacts to unique renewable resource values, 613,000 acres would be subject to protective stipulations in Area B." This statement should be clarified to make clear that the mining activities that are presently occurring or which have occurred during the past 10 years in Area B, have caused minimal impacts to these values because of the voluntary measures implemented by EFN, and that the protective stipulations which may be imposed in Area B under the final RMP would not be greater than the measures which are presently being implemented voluntarily by the mining companies that are active in this area. | 8

The description of existing uranium mining activities within the District presented on page III-5 should be updated to reflect that presently there is one mine in production, two in various stages of development, two in reclamation, and that three have been successfully reclaimed. Similar changes should be made on page III-38 to conform to the current situation. | 9

The number of acres disturbed by the Kanab North Mine shown on Table III-6 should be corrected to read 17.3 acres instead of 3.7 acres as shown on the RMP/EIS. | 10

In Appendix 5 (page A-13) Stipulation 17 should be deleted as not being in the nature of a stipulation. Stipulation 18 should be changed to eliminate the suggestion that powerlines | 11

05-256 (continued)

8. The impacts of mineral exploration and development described in Chapter IV are based on an evaluation of current mining activities on the district. The analysis shows that many of the impacts are temporary in nature and are not significant. The reclamation stipulation found in Appendix 5 are similar to those being used by EFN.

9. The text has been changed to reflect this comment.

10. Approved mine plans and plan amendments on file with this office for the Kanab North mine indicate that 17.7 acres either have or will be disturbed in connection with mine yard development. The text in Table III-6 has been changed to correct this error.

11. The text has been changed to reflect this comment.

05-256 (continued)

might be required to be installed underground. Given the temporary nature of mining and its impacts, to require powerlines to be installed underground would not be warranted nor reasonable. Indeed, the additional surface impacts resulting from underground installation further argues against such a requirement.

We agree with the conclusion in the RMP/EIS that the mineral potential for commercial breccia pipe deposits throughout the district is extremely high. In fact, because of the uniqueness of the high grade uranium deposits which occur only within this region of the country, we believe that the BLM should acknowledge in the final RMP that the mineral development within the District should be treated as one of the highest and best uses of the land, and that in the event of conflicts with other resource values within the District, the mineral values will be preferred. Of course, as the last 10 years have demonstrated time and again, in almost all instances, conflicts between mineral development and the other resource values in the District can be resolved through reasonable mitigation measures and compromise. However, should irreconcilable conflicts exist, the mineral values which uniquely occur in the District should be given priority, particularly over values such as primitive recreation or remoteness -- values which are more than amply protected throughout the region. See the attached Regional Map.

In Appendix 31, an assumed mining scenario for underground uranium mining during the planning cycle is set forth. Because of the uncertainties associated with the discovery of commercial breccia pipe uranium deposits and the world market for uranium, the scenario described is a reasonable one. However, the final RMP should emphasize the uncertainties associated with the assumed scenario and should state unequivocally that because of the minimal impacts associated with these types of mining operations, none of the conclusions within the RMP would be affected should the scope of mining proposals exceed the assumptions set forth in the mining scenario. The monitoring data on both air and water quality demonstrate unequivocally that the impacts from these operations are confined to within less than 2,000 feet of the operation, and that upon completion of activities full and complete reclamation is achievable. 12

2. Adjacent Federal Lands.

At page II-4 of the RMP/EIS reference is made to "the need for more focused management in areas with special values and the management objectives of adjacent federal lands". What management objectives are being referred to, and how might these adversely affect the multiple use and sustained yield mandate of 13

12. The RMP/EIS addresses impacts reasonably expected to occur in the district through the life of the plan. Impacts analyzed include those associated with the type of mineral exploration and development which has occurred and is reasonably expected to occur in the future. We recognize that it is impossible to analyze all impacts associated with the development of undiscovered mineral resources. Each Plan of Operation submitted for proposed mineral development would undergo an analysis environmental impacts. A decision would be made, based on that analysis, whether the proposal would have significant adverse impacts on the human environment and whether an environmental impact statement is needed. The EAs prepared to date show that the environmental impacts associated with the development of uranium from breccia pipes are localized and that development has not resulted in significant adverse impacts to the human environment.

13. The objectives referred to are the objectives of adjacent areas managed by the U. S. Park Service. In managing public lands of the Arizona Strip located adjacent to National Parks and Recreation areas, close coordination is important between BLM and the Park Service as a standard protocol between two agencies of the Department of the Interior. That protocol and an appreciation of each agency's mission and ongoing programs are reflected in this section of the RMP. See page IV-30 for Impacts to Adjoining Lands.

the BLM? Clearly, the objectives of the National Park Service in the management of the Grand Canyon National Park are significantly different than the objectives of multiple use and sustained yield under FLPMA, and to the extent feasible, the BLM and the Park Service should make reasonable attempts to cooperate as each seeks to implement their respective responsibilities to manage the lands under their jurisdiction.

However, the BLM should not justify restrictions or prescriptions within the District on the basis of the objectives of adjacent federal agencies. The lands available for multiple use within the region are increasingly small, and it is vitally important for the BLM to insure that such uses are not only permitted with minimal restrictions or prescriptions, but also encouraged. Multiple use is the mandate of, BLM in the same way that remoteness and preservation are the mandate of the National Park Service. Both objectives achieve valuable and important public policies, but they should not be allowed to overlap to the detriment of either. Moreover, the experience in the District has demonstrated that cooperation and coordination between the BLM and adjacent federal agencies can be achieved without unwarranted interference with multiple use principles, provided that the lines of communication are open and the differences between the agency mandates are respected.

3. Withdrawals.

The proposal in Alternative 3 relating to withdrawals from mineral entry of each of the areas designated as ACECs is without support in the data, contrary to the mandate of the BLM to manage for multiple use and sustained yield, and unjustified. This proposal should be rejected in the final RMP as inappropriate.

The proposal should also be rejected as directly contrary to Congressional intent as expressed in the Arizona Wilderness Bill of 1984. As you know, in 1984 Congress enacted the Arizona Wilderness Act of 1984 (the "Act"). Title III of the Act designated approximately 390,000 acres as wilderness and released from the interim management protection constraints of Section 603 of FLPMA approximately 620,000 acres. Title III was the culmination of a landmark compromise negotiated with the participation, input and agreement of conservation organizations, EFN and other mineral interests, ranching interests, local communities, and other users of the public lands. It was a compromise that was possible because all interests had something to gain from the outcome. Specifically, the conservation organizations ensured that substantial acreage which they deemed essential were desig-

nated as wilderness and removed from the operation of the mining laws and other multiple use and sustained yield principles. The mineral interests, local communities and ranching interests, likewise, ensured that the wilderness study areas which were not designated as wilderness would be released from the interim management protections of Section 603 of FLPMA and that these lands would be managed in the future under principles of multiple use. As the legislative history and the language of Title III make clear, the Act was intended to resolve the land management question with respect to wilderness designation and multiple use management lands for the foreseeable future. In the words of Congressman Udall on the floor of the House of Representatives:

> So I am proud to bring this bill before the House today: Proud of a bill that settles the land management question on nearly 3 million acres of public lands for the foreseeable future so that ranchers, miners, timber people, and other users of the land can get on with intelligent planning for their business; proud of a bill that was put together by the hard work, cooperation and spirit of compromise of so many Arizonans; and most of all, proud of a bill that preserves more than 1 million acres of my State as my father and my father's father knew it when they came to Arizona and helped to build it, as I have known and enjoyed it throughout my life, and so my children and my children's children can know it and enjoy it throughout their lives.

EFN was proud to be a part of this landmark compromise. Indeed, we believe that the agreement of the other mining interests and the local communities to the wilderness compromise would not have been possible without the assurances given by Congress and the environmental community that once the compromise became law, the areas not designated as wilderness would be managed under multiple use principles for the foreseeable future. A fundamental premise of the negotiations and the ultimate compromise with respect to acreage and location was that the lands within the Arizona Strip which were not designated as wilderness would be open and available for mining and other multiple use activities. To be sure, all of the regulatory requirements necessary to authorize mining or other multiple use activities on the federal lands would still be required, but the issue of whether these activities were appropriate or permissible was resolved. To suggest otherwise is to attempt to rewrite history.

The spirit of the negotiations and the compromise which resulted from those negotiations was a model of how land manage-

05-256 (continued)

ment decisions can and should be made. That spirit should not be allowed to be destroyed at the urging of a small group of individuals or organizations who, now that the wilderness areas have been Congressionally mandated, choose to forget the basic understandings and commitments which forged the compromise. Implementation of the proposal to withdraw from mineral entry the areas designated as ACECs would destroy that spirit.

4. Conformity and Implementation.

43 CFR Section 1610.0-5 provides that existing plans and approvals should be made to conform to the requirements of the RMP. Consequently, the BLM should specifically state in the final RMP that existing mining activities and plans of operation within the District are in conformity with the selected Alternative of the RMP.

5. Utility Corridors, Rights-of-Way and Access.

With respect to utility corridors and rights-of-way, the BLM should specifically state in the final RMP that temporary powerlines and rights-of-way associated with uranium mineral development in the District will continue to be permitted, regardless of the Alternative selected, and that temporary powerlines and rights-of-way associated with mining activities would be consistent and in conformity with each Alternative discussed in the RMP/EIS. Such powerlines and rights-of-way are temporary in nature and necessary to the development of the unique mineral deposits which are found in the District. The issue of temporary powerlines, temporary roads and access necessary to mineral development should not be left ambiguous in the final RMP. 14

The implications of the OHV designations also should be clarified in the final RMP. A careful reading of the definitions of each designation set forth in Appendix 22 makes clear that in areas designated as "limited to existing roads and trails", grazing permittees, mining claimants, right of way holders and the like will continue to be permitted to drive off-road in connection with their activities, and that in areas designated as "limited to designated roads and trails", off-road travel will be permitted as long as prior approval, based on need, is obtained. Similarly, it is clear, on careful reading, that, under each Alternative, in areas designated as "closed", approvals from the authorized officer to use closed roads and trails will be issued on a case-by-case basis for mining activities and grazing activities when needed. However, to avoid confusion in the future, we believe the final RMP should expand the discussion in the text of the RMP consistent with the text of Appendix 22 so that the 15

14. Temporary power lines and rights-of-way would continue to be granted. Each application would be assessed under NEPA regulations on a case-by-case basis. See changes in text (II-9 and IV-2).

15. See changes in text page A-66.



G. William Lamb
Arizona Strip District Manager
Arizona Strip District Office
May 18, 1990
Page 14

public and the grazing and mining communities do not misinterpret the designations as imposing greater restrictions on use than is intended. The right of access to the District is a very important issue to all of the users of the public lands, and consequently, the limitations on those rights should be precisely and clearly defined. Moreover, it is equally important that the final RMP reflect the importance of agency discretion in decisions relating to rights-of-way and access.

6. ACEC Designations.

ACEC designations should ordinarily be limited to the smallest area necessary to protect a resource. The proposed ACECs in Alternatives 2, 3, and 4 do not appear to have been so limited. The BLM should re-evaluate the proposed ACECs to determine whether restrictions on the entire areas proposed are necessary. Designation of an area as an ACEC is also unnecessary if a less restrictive form of management will suffice. We agree with the rationale provided in Appendix 6 for the ineligibility determinations made with respect to many of the areas considered for ACEC designation. However, we urge the BLM to re-evaluate its proposed decision with respect to the areas proposed for ACEC designation in each Alternative to determine if some less restrictive designation would be adequate to protect the resource value identified as needing special protection. However, the ACECs proposed in Alternative 4 comes closest to meeting the criteria for ACEC designation, and after evaluation to determine if the areas designated can be reduced further, the ACEC proposed in Alternative 4 should be the area selected in the final RMP. The areas proposed for ACEC designation in Alternative 3 are clearly excessive and cannot be justified. While the areas proposed for ACEC designation in the Preferred Alternative are more supportable than those proposed in Alternative 3, we believe that the values sought to be protected through the proposed ACEC designations in the Preferred Alternative can be adequately protected through existing management tools without the necessity of ACEC designation.

Importantly, apart from unregulated OHV use or mineral development under a notice of intent, there are few land uses that disturb the surface of the BLM lands that do not receive prior BLM review and approval. Consequently, BLM generally will have an opportunity to review and regulate proposed land use within an ACEC to prevent damage to the resources that are the basis for the designation. The BLM does not need to categorically exclude other land uses in the ACECs, by mineral withdrawal or otherwise. Rather it need only to regulate such

uses as they are proposed to ensure that important resources are protected.

Whatever the ACEC designations in the final RMP, we do not disagree with the proposal of the BLM to require a plan of operations prior to commencement of exploration or mining activities within areas properly designated an ACEC. However, the final RMP should make clear that the designation of an ACEC shall not be interpreted to prohibit or even discourage exploration or mining activities in these areas. Rather, the final RMP should specifically state that an ACEC designation only implies that more restrictive stipulations may be necessary in those instances in which the proposed mining activities may unreasonably interfere with the values sought to be protected by the ACEC designation. The standard for mining plan approval would continue to be the "unreasonable and unnecessary degradation" standard.

7. Peregrine Falcon.

With respect to the peregrine falcon populations which exist in the District, the final RMP should specifically note that mining and the peregrine falcon, even in areas rated as superior on Map II-17, have successfully coexisted for the past 10 years. The nature and extent of the peregrine populations in the District have been shown through cooperative studies between the BLM, the Arizona Game & Fish Department and EFN, to be healthy and growing during the same 10-year period that uranium mining has been occurring in the District. This data and the success of the programs to minimize impacts to the peregrine falcon populations from mining activities should be noted so that as future mining proposals are evaluated concerns with adverse impacts on peregrine falcons are minimized. 16

We question the appropriateness of imposing limitations on oil and gas exploration due to presumed impacts on peregrine falcon populations as proposed in the Preferred Alternative. Given the strong data which exists that the peregrine falcon is prospering on the District, such limitations on an across the board basis is unwarranted.

8. Grazing Issues.

If, as stated at page II-24, the BLM intends to adopt, as part of the final RMP, existing Allotment Management Plans, it should be clearly stated that these plans will not be amended or altered in any material way which might adversely affect the grazing allottees unless and until a plan amendment is adopted

05-256 (continued)

16. We cannot accurately state that peregrine populations have recently increased. Recent inventory efforts have expanded to different areas which have revealed additional breeding pairs. The increase in total numbers may be a result of a greater inventory area, rather than an actual increase in density.

At this time we have no factual information on adverse effects of uranium mining facilities on the peregrine falcon. The extent of coexistence between peregrine nesting sites and existing mining facilities is difficult to measure because of the many variables involved. The present mitigation employed to protect nesting peregrine falcons from uranium exploration seems to be adequate.

A five-year cooperative research effort initiated by the Bureau, Arizona Game and Fish Department and Energy Fuels Nuclear, Inc. in 1988 will provide additional knowledge on the status of the species as well as a better understanding of the extent of coexistence between peregrine falcons and uranium mining.

after full opportunity for public input and comment. The ranching community is entitled to this assurance.

9. Recreation Issues.

Recreation, particularly backcountry primitive recreation, is greatly overemphasized in each of the identified Alternatives, other than the No Action Alternative. Recreation is but one value in the multiple use spectrum, and yet the RMP/EIS treats it as if it is entitled to a unique place in the planning process. Clearly, primitive recreation is entitled to a place at the multiple use table, but it is not entitled to greater consideration than other equally important uses, such as mining, ranching, timber, and other less pure forms of recreation. This is particularly true in a region like the one at issue here. As noted earlier, this region already has vast areas "reserved" for primitive recreation in extremely remote settings in the form of National Parks and Monuments and Congressionally designated Wilderness Areas. Each of the decisions which have been shaped by the emphasis on primitive recreation and preservation of remoteness in the RMP/EIS, regardless of the Alternative involved, should be re-evaluated to ensure that the decision, or proposed decision, has not been inappropriately influenced by a presumed need to preserve opportunities for primitive recreation.

For example, in the Preferred Alternative, the BLM proposes to make the Parashant Area an RCA in order to protect the primitive backcountry recreational values. And yet, the Parashant Area is immediately adjacent to the Lake Mead National Recreation Area and the Grand Canyon National Park -- areas where primitive recreation is assured. In our view, the BLM should not impose restrictions on grazing and mining activities in this area on the basis of primitive recreation.

10. Selection of Preferred Alternative.

EFN believes that the BLM should select Alternative 4 in the final RMP, subject to the comments set forth throughout this letter. Alternative 4 is consistent with the mandate of the BLM to manage under principles of multiple use and sustained yield, and it is most sensitive to the needs of the local communities for access to the federal lands for grazing, mining and recreation in all of its forms. Alternative 4 will assure that the many and varied interests who utilize the federal lands will be able to continue to do so without unreasonable or unnecessary restrictions, and yet this Alternative will also insure that the sensitive resources of the district are not seriously impacted in the long term. Importantly, the selection of Alternative 4 will

05-256 (continued)

eliminate the various SRMAs and RCAs proposed in both Alternative 2 and 3. Such special management areas are not necessary to protect the recreational, cultural and scenic values of the District, nor are they necessary to maintain the essentially remote character of the District. Finally, eliminating these "hybrid" special management areas would be consistent with the Congressional intent expressed with the enactment of the Arizona Wilderness Act of 1984. With the passage of this Act, several existing primitive areas and special category lands within the District were eliminated. Indeed, in the consideration of the Bill, Congressman Seiberling was asked by the environmental interests to maintain some of the special category lands for further study and interim protection. Congressman Seiberling rejected such requests as inappropriate. The BLM should do likewise. The "zoning" approach to public land management suggested by the proposed special management areas has no place in the management program of the BLM on "multiple use" lands. Zoning approaches may be appropriate on lands which Congress has set aside for special management such as the National Park System, but such an approach should not be followed on lands which Congress has specifically stated shall be managed for multiple use.

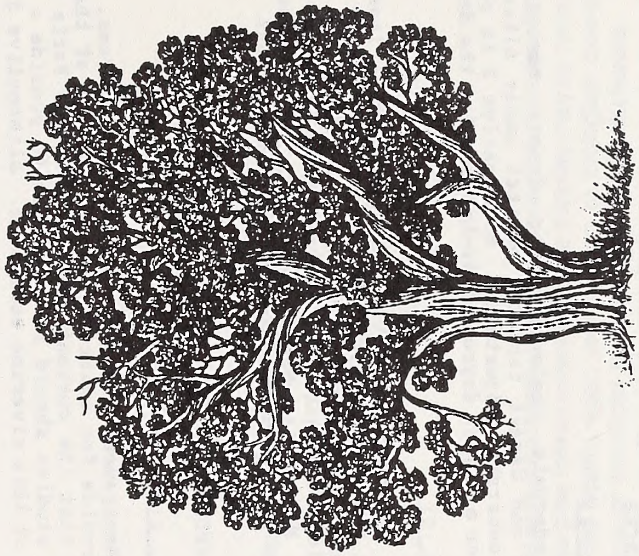
We appreciate the opportunity to provide our comments on the RMP/EIS. We look forward to continuing to work with the BLM as it proceeds to the selection of a final RMP. We would welcome the opportunity to discuss our comments with you in greater detail should you feel that such discussions would be useful.

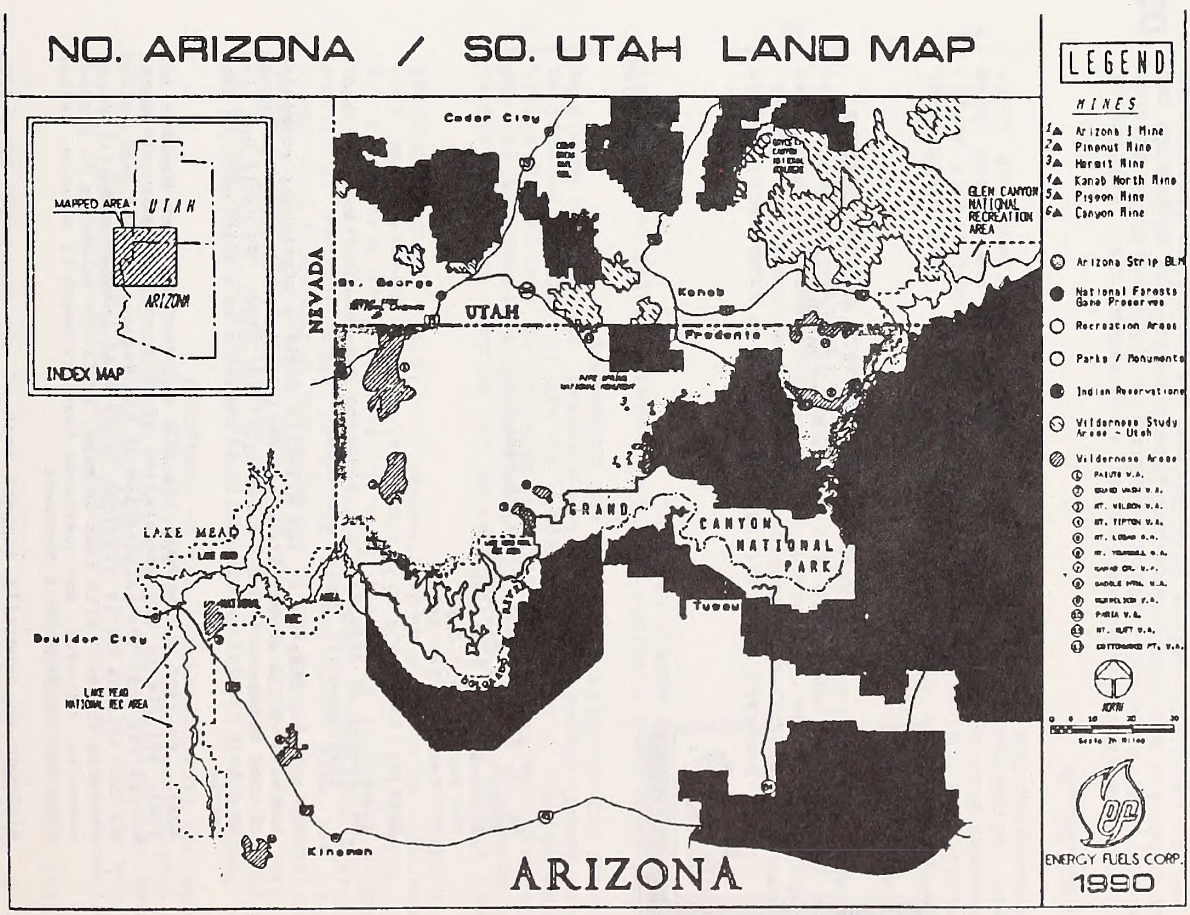
Sincerely,

Brad L. Doores

Brad L. Doores
Vice President - Legal and
Regulatory Affairs

BLD/kll
Enclosure





05-256 (continued)

THE WILDLIFE SOCIETY, ARIZONA CHAPTER
P.O. Box 11135
Phoenix, AZ 85061-1135

May 21, 1990

Mr. G. William Lamb, District Manager
Bureau of Land Management
Arizona Strip District
390 North, 3050 East
St. George, Utah 84770

Dear Mr. Lamb:

Re: Review of Arizona Strip Resource Management Plan (RMP) and Environmental Impact Statement

The Arizona Chapter of the Wildlife Society previously submitted comments on the above-referenced document in a letter to the Bureau of Land Management (BLM) dated April 20, 1990. We would now like to submit the following additional comments as a supplement to that letter.

Again, we want to commend the BLM and the RMP team members for their efforts in the preparation of this comprehensive document. We realize that the integration of the various uses of public land on the Arizona Strip requires trade-offs between a multitude of resource values. With this in mind, it is our intention to provide comments, concerns, and questions that are meant to enhance, rather than detract from this document.

Although we generally support most of the management direction proposed in Alternative 2 (the preferred alternative), we have major concerns with some issues and resources. We believe that the best possible approach would be a combination of management directions from Alternatives 2 and 3.

To help organize our comments, we will follow the format provided in Table II-1 (Pages II-8 to II-38) of the Draft RMP. It is hoped that this method will reduce confusion.

LAND RESOURCES

Concern No. 1:

Lack of adequate protection for desert tortoise (Xerobates agassizii) and desert tortoise habitat under Alternative 2 with regard to ownership adjustments. Alternative 3 is preferred as it provides for a higher degree of protection for the desert tortoise.

Concern No. 2:

Additional agricultural entry and agricultural leases within the Beaver Dam Wash area should be discouraged and/or discontinued. Even though concessions for desert tortoises are proposed, the issue should be retention and protection of riparian habitat within this area. We support Alternative 3 to discontinue agricultural land leases and reclaim to near natural conditions.

WATERSHED RESOURCES

Concern No. 1:

Under the Management Direction for Water Resources, Alternative 2 does not provide for instream flow monitoring of the Paria River. We believe that the current condition of the Paria River is such that these studies should be conducted to provide a data base for management of this riverine ecosystem. Alternative 3 is preferred.

SPECIAL STATUS SPECIES

Concern No. 1

Alternative 2 for both plants and animals is not adequate to properly protect and/or manage Special Status Species. Alternative 3 provides a higher degree of protection over a wider range of species and is our preferred alternative.

RIPARIAN AREAS

Concern No 1:

Lack of protection for the Beaver Dam Wash in Alternative 2. Alternative 3 is preferred, since it includes the Beaver Dam/Virgin River confluence as a riparian demonstration area. Due to increased development of the Beaver Dam/ Littlefield communities, this riparian area requires increased protection.

05-257 (continued)

FOREST WOODLAND RESOURCES

The management of remnant Ponderosa Pine (Pinus ponderosa) stands on the Arizona Strip is of primary concern. We believe that these areas of Ponderosa Pine do not lend themselves to commercial tree harvest. These areas do not represent a situation where "normal" Ponderosa Pine management can be conducted.

The Ponderosa Pine stands on the Arizona Strip consist mainly of stringers with many of the stringers occurring in drainages. Much of the area is on limestone soils which is a relatively harsh environment for growth and/or regeneration of Ponderosa Pine. These areas are more conducive to growth of pinon-juniper (P-J) and probably represent a past climatological event that supported a limited growth of Ponderosa Pine. Cutting in this area would, in all probability, result in accelerated P-J invasion and type conversion which would de detrimental to wildlife species dependent on Ponderosa Pine.

These stands are unique features on the Arizona Strip and add to the diversity of the area. We question the statement in the RMP that uses the term "stagnant" in relation to old growth within these stands. Granted, old growth is not as dynamic as earlier successional stages, but it is not stagnant. These areas should be managed for wildlife, visuals, and uniqueness. 1

Listed below are 6 specific points of concern related to management of Ponderosa Pine within the RMP.

Concern No. 1:

Lack of any boundary identifications for which commercial and/or selective thinning of Ponderosa Pine is to occur in the Mt. Trumbull/Mt. Logan, Parashant and Black Rock Mountain Ponderosa Pine vegetation components for all four alternatives and their accompanying EIS over the next 15 years. 2

Concern No. 2:

Lack of adequate documentation or references that sufficient sensitive soil mapping and inventory has been completed to permit Ponderosa Pine harvest or selective thinning in any of the three areas referenced in NO. 1 for all four alternatives and their accompanying EIS over the next 15 years. 3

Concern No. 3:

Lack of adequate documentation or references that sufficient historical silvicultural stand examination files exist to provide that federally mandated commercial pine regeneration standards can be met to permit Ponderosa Pine harvest or selective thinning in

1. See general response to public comments page IV-9.

2. Additional work is necessary to inventory and determine specific areas within the ponderosa pine forests where selective thinning may be necessary and advisable for the health, vigor, regeneration or biological diversity of the forest ecosystems or beneficial to dependent wildlife resources. The intent is to address such specifics in the detailed management plans for the Resource Conservation Areas in which the forests occur.

3. Additional soil inventory and mapping will be done in developing a management plan for the ponderosa pine areas. The management plan will identify sites where selective thinning is appropriate and compatible with multiple use objectives, including watershed protection. Detailed management plans will be prepared for the Resource Conservation Areas in which the forests occur. Approval of the plans will be subject to the completion of an EA.

any of the three areas referenced in NO. 1 for all four alternatives and their accompanying EIS over the next 15 years.

Concern No. 4:

Lack of adequate documentation or references that sufficient wildlife inventory for state listed sensitive species such as the Spotted Owl or Goshawk exists to permit Ponderosa Pine harvest or selective thinning in any of the three areas referenced in NO. 1 for all four alternatives and their accompanying EIS over the next 15 years. 4

Concern No. 5:

Lack of adequate documentation or references that a definition of Ponderosa Pine old growth exists and lack of exact boundary identification of old-growth stands to be retained in any of the three areas referenced in NO. 1 for all 4 alternatives and their accompanying EIS over the next 15 years. 5

Concern No. 6:

Lack of adequate documentation or references that State Game and Fish Department managers have or will be consulted on the impacts of the RMP's proposed Ponderosa Pine harvest or selective thinning in any of the three areas referenced in NO. 1 for all four alternatives and their accompanying EIS over the next 15 years. 6

Having noted the aforementioned Points of Concern 1 - 6, we provide the following list of corrigenda, substantiating the concerns from the draft RMP summary continuing through Chapter IV. Many of the Points of Concern are referenced by location and not repeated in their entirety. They may be found in the first draft of the "Arizona Strip District Resource Management Plan and Environmental Impact Statement" filed with the EPA on November 29, 1989. Additional questions or needed points of clarification are also asked.

Page S-4, Table S-1, Resource Conservation Areas, Parashant and Mt.Trumbull (Concerns 1 - 6)

Page S-14, Table S-7, Forest/Woodlands (Concerns 1-6)
QUESTIONS: Does the term "Forest" as used refer to just Ponderosa Pine acres designated for "selective thinning" or all acres of the Ponderosa vegetative component? Is a "selective thinning" site selection map available for public review? Do you have a definition of "old growth" available for public review? Are maps of "old growth" areas available for public review? 7

4. Inventory for threatened, endangered or sensitive species such as the spotted owl and Goshawk will be done for projects like the forest management plan, particularly since wildlife habitat management and projects to enhance habitat conditions are integral components of this program.

5. A definition of ponderosa pine old growth has been added to the glossary. Old growth stands are one of the important components of the ponderosa pine ecosystem and require special consideration in developing a program that meets the maintenance, protection, health, vigor, regeneration capability needs and biological diversity aspects of the ecosystem. We intend to maintain the old growth stands but inventories of those stands are not complete. Delineation of the old growth stands will be accomplished as part of the development of plans for the Resource Conservation Areas in which the ponderosa pine forests occur.

6. The Arizona Game & Fish Department (AGFD) will be contacted for consultation and review in the preparation of forest management plans and the EAs associated with the plans. AGFD involvement is especially pertinent in this matter since a major objective of the forest management plan is to maintain productive habitat for wildlife and, where possible, improve habitat conditions in accordance with Habitat Management Plans.

7. The term "forest" applies to all the acreage on which stands of ponderosa pine occur on the public lands administered by BLM. A definition of "old growth" has been incorporated into the glossary. Appropriate management maps of the ponderosa pine forests will be developed in association with the development of plans for the respective Resource Conservation Areas in which the forest occur, and will be available for public review.

05-257 (continued)

Page S-15, Table S-7, Wildlife, (Concerns 1-6)
QUESTIONS: In Alternative NO. 2 (preferred action), if designation of an RCA allows management of "Ponderosa Pine to enhance wildlife values", how are the enhancement criteria and decision matrix arrived at and by whom? Are these criteria subject to public involvement and review? Are the proposed "selective thinning" areas driven by other resource needs such as wildlife? | 8

Page S-15, Table S-7, Wildlife, (Concerns 1-6)
QUESTIONS: On Alternative NO. 4 If "Managing Mt. Trumbull and Parashant areas for timber harvest could have a negative impact on wild turkey, raptors and Kaibab squirrels", how can timber harvest be beneficial to mule deer? Do such beneficial relationships and data exist for these specific areas? | 9

Page S-16, Table S-7, Recreation Resources (Cont.) (Concerns 1-6)
QUESTIONS: On Alternative NO. 2: How will "Ponderosa Pine forest management create short term adverse impacts and long term positive impacts to recreation use"? What time frames are used to define short term or long term? How are the criteria and decision matrix arrived at and by whom? Are these criteria subject to public involvement and review? | 10

Page II-21, Issue/Resource: Forest/Woodland Resources
Existing Plans and Decisions: (Concerns 1-6)
QUESTION: Why are HMP's not referenced as supporting documents along with MFP's as the HMP's do contain specific language with regards to Ponderosa Pine management for wildlife values? | 11

OBJECTIVES: (Concerns 1-6)
QUESTIONS: What criteria and decision matrix was used to change the status and value of Ponderosa Pine forest to ones that are "well-managed" with potential for "sustained yield"? No former MFP or HMP has ever placed the Strip Ponderosa Pine vegetative component in this commercial category. Are the designations of wilderness within and near these "productive ecosystems" taken into account when changing these values? What criteria and design matrix was used to change these Ponderosa Pine forests status to one which will "achieve and maintain optimum growth of Ponderosa Pine, thereby maintaining the health and vigor of the stands"? Were these changes subject to public review and comment? | 12

Page II-22 Issue/Resource: Forest/Woodland Resource (Cont.) (Concern 1-6)
COMMENT AND QUESTIONS: Same as in Page II-21, Specific to the quote "Protect Ponderosa Pine stands from serious insect and disease infestations". This comment again suggests management of a commercially managed Ponderosa Pine forest not a Ponderosa Pine forest "managed for other resource uses". | 13

8. The AGFD will be consulted for consultation and review in the preparation of RCA plans and the associated EAs. A public advisory group which the AGFD would be encouraged to join, will guide development of plans for both the Mt. Trumbull and Parashant Resource Conservation Areas. We anticipate that criteria and objectives, including enhancement of wildlife values, would be developed cooperatively by the advisory group. Selective thinning actions would be driven mainly by the objective of maintaining healthy, viable and biologically diverse forest systems. Other principal objectives are maintenance of good aesthetics for recreation users, wildlife habitat, habitat enhancement and management ensuring that ground fuels are reduced and kept at appropriate levels.

9. Creation of openings in dense forests and providing an edge effect and better interspersion and juxtaposition of habitat, often result in improved habitat for deer.

10. See the impacts section (page IV-20) for the explanation of impacts associated with the forest management program. The criteria involved were developed by the interdisciplinary team that analyzed the impacts of implementing the four alternatives.

11. A reference to habitat management plans as supporting documents has been added to this section, since these provide specific language with regard to ponderosa pine management for wildlife values.

12. The principal basis for the decision to implement an active forest management program is that these ponderosa pine forests and their associated ecosystems are important components of the public lands and require thoughtful, focused management in order to maintain and protect them. Note that neither the draft RMP/EIS (preferred alternative) or this final document, put these forested areas in the commercial category, but classed them instead in BLM's management Category C, "areas where forest management activities are specifically for the benefit of other identified resource uses or values". Management objectives for nearby wilderness areas were considered in determining the appropriate category for the ponderosa pine areas.

13. Keeping open the option of insect and disease control is advisable and appropriate, given our responsibilities in protecting and managing the ponderosa pine forests and their associated resources. While this may imply commercially managed forests to some, it is sometimes a necessary action as is fire suppression to prevent catastrophic loss of this important component of the public lands of the Arizona Strip District.

05-257 (continued)

What is meant by the following statement: "maintain appropriate old growth and dead and standing Ponderosa Pine and healthy understory of vegetation (oak and other species)for wildlife habitat and natural aesthetics"? | 14

What level or percentage of the remaining old growth is "appropriate"? Perhaps all of the Strip District remaining old growth should be retained. This definition is of critical environmental concern and warrants full public review and disclosure prior to treatment or reduction in existing old-growth stands in the Ponderosa Pine component on the Arizona Strip District. | 15

Page II-23 Forest Alternative 2 Preferred Alternative "Designations" (Concern 1-6)

QUESTIONS: Does the 15,200 acres designated for category C include all the Ponderosa Pine acres outside wilderness Ponderosa Pine areas? Does the figure intend that all Ponderosa Pine areas outside the wilderness acres fit in this category? | 16

"Management Direction Alternative 2"

QUESTIONS: Are the "carefully designed and administered selective thinning, disease control and prescribed burns" recommended, subject to public review? These proposed management actions suggest that an environmental assessment be prepared for each action with full documentation on the impacts to all other resources and users--- Will these be done? If so what level of public notice and opportunity to comment will be offered? | 17

Page II-29 "Mt. Trumbull Area-Designation and Objective Alternative 2"

COMMENT: Strongly agree on new designations.

Page II-48 "Mt. Trumbull Area, Forest and Woodland Management: Forest: (Concerns 1-6)

QUESTIONS: What is the definition of a "viable productive forest"? Also, why are you proposing to "develop a timber management plan" if the Ponderosa Pine acres are designated as "forest management for the enhancement of other uses"? (See II-23 Alternative 2 Preferred). | 18

Also this statement is inconsistent with the statement used for the "Parashant area forest and woodlands management" where the statement of direction for Ponderosa Pine is simply to "manage for enhancement of other resource values". Why is Mt. Trumbull treated differently? Is Mt. Trumbull Ponderosa Pine not going to be "managed for enhancement of other uses"? | 19

We raise serious concerns that a "timber management plan" would be permitted after designating the Ponderosa Pine acres for "enhancement of other uses". This action would also suppose and we request that a separate and complete environmental assessment | 20

05-257 (continued)

14. This statement means that in managing the ponderosa pine forests, major considerations are the needs of wildlife, natural aesthetics and maintaining old growth stands as one of the major natural components.

15. The specific aspects of forest management will be developed in plans for the Resource Conservation Areas. Maintenance of old growth stands as a major natural component of the ponderosa pine ecosystems and the public lands of the Arizona Strip District is a specific objective of the program. Public involvement in the preparation of plans and the associated NEPA compliance documents for the Resource Conservation Areas are integral parts of that planning effort.

16. The 15,200 acres is the total acreage within the Arizona Strip District classified as ponderosa pine forest, including the wilderness areas. The intent is that all of the ponderosa pine forest located out of the wilderness areas be managed under Category C.

17. To ensure appropriate public involvement, the intent is to establish a multi-interest group to assist in developing the plan for the Mt. Trumbull and Parashant Resource Conservation Areas and the associated management objectives and practices. An associated EA will be prepared on the plan for each Resource Conservation Area. In addition, the plan and the EA will be available for public review and comment.

18. A "viable productive forest" means a ponderosa pine forest ecosystem which is healthy and biologically diverse and which is capable over the long-term of maintaining regeneration capability and productivity for ecological aspects such as wildlife habitat, vegetative composition and diversity. A "forest management plan" will be developed rather than a "timber management plan".

19. The Mt. Trumbull and Parashant areas will both be designated as Resource Conservation Areas and the ponderosa pine forests in both areas will be managed under Category C guidelines, which means that forest management activities are specifically for the enhancement of other uses.

20. A forest management plan will be prepared in association with the development of the overall plan for the Mt. Trumbull Resource Conservation Area rather than a timber management plan. NEPA compliance and public review and comment is a part of that planning process.

or environmental impact statement be prepared for public review and comment prior to the implementation of any Mt. Trumbull "timber management plan".

Page III-23 Ponderosa Pine (Concerns 1-6)
QUESTIONS: Why was a map of the "7,266 acres of commercial" Ponderosa Pine forest and Parashant acres of 1,940 not included in this RMP? On what dates were these same acres and stands last inventoried to produce the capability data of yielding at least 20 cubic feet of wood per acre per year? Are all of these referenced acres on suitable soil which would permit commercial harvest activities? 21

Page III-48 Map III-8 "Ponderosa Pine Areas" (Concern 1-6)
QUESTIONS: Same comment on Mt. Trumbull and Parashant commercial acres: Why are the commercial acres of 7,266 and 1,940 not displayed for public review and comment? Again, if future proposed actions include treatment in these areas, full public involvement and disclosure is warranted. 22

Page III-50 Erosion Condition (Concern 1-6)
QUESTIONS: When was the last soils erosion inventory made within the Ponderosa Pine Component in the Mt. Trumbull area? What methodology was used to produce this map data? 23

Page IV-7 From Forestry/Woodland
COMMENT: Please note in the sentence "An insect infestation of disease could be facilitated by an old growth stagnant stand of Ponderosa Pine and result in many trees dying". You are in fact describing the physiology of old-growth dynamics and not the negative impacts of maintaining an old-growth forest. These insect and disease processes are important for the maintenance of old growth obligate wildlife species and their associated niche and foraging requirements.

Page IV-35 From Forestry/Woodland
COMMENT: Agree strongly that this alternative will be beneficial to watershed resources. The management strategy however would not necessarily increase the risk of catastrophic fire if a public reviewed fire management plan were prepared for the Mt. Trumbull area.

Page IV-38 From Forest and Woodland Management, Paragraphs 2 and 3 (Concerns 1-6)
QUESTIONS: Again, the language and terminology used interchangeably are confusing. The treatment and "removal of trees stagnating from shade and overcrowding" implies commercial treatment of old-growth Ponderosa Pine. Is this the intent of Alternative NO. 2? How does this "create a beneficial impact? Why is there an emphasis on "disease control" in a non-commercial forest designated for "the enhancement of other uses"? Which 24

05-257 (continued)

21. The information on ponderosa pine on page III-23 of the draft RMP/EIS was incorporated to provide background knowledge of the affected environment related to forest/woodland resources. Past commercial harvest has had a role in the affected environment and these acreage figures simply convey that past inventories indicate the presence of ponderosa pine stands with commercial value. A map was not provided in the draft RMP/EIS or this final because this is inventory and background information for the affected environment section rather than for areas proposed for designation for commercial forestry or harvest in any of the alternatives.

22. See response 21 and 17.

23. In 1974, a detailed soil survey of the Mt. Trumbull/Mt. Logan area was completed by the SCS. Information has been recently updated by completion of an Order III soil survey of the Vermillion Resource Area. The Parashant and Black Rock Mountain areas are currently being surveyed at Order III level by SCS as part of the Shivwits Resource Area soil survey to be completed by 1992.

24. The intent of Alternative 2 and now the Proposed Action, is to actively manage the ponderosa pine forests and associated ecosystems for the benefit and enhancement of other uses. See response No. 13 regarding insect control. Wildlife species which would benefit from this program and associated habitat maintenance and improvement are deer, turkey and squirrel. Benefits to wildlife would be achieved by maintaining, over the long range, the forest ecosystem on which they are dependent and by improving the quality of habitat regarding such factors as interspersion, edge effect, forage and cover.

05-257 (continued)

wildlife species would be the recipient of these "positive impacts"?

Page IV-39 From Special Designations (Concerns 1-6)
QUESTION: How does maintaining old growth forests in a "healthy condition" benefit old growth obligated wildlife resources? | 25

CONCLUSION: (Concern 1-6)
QUESTIONS: Please define what is meant by "thinning operations". Are these considered commercial treatment? Are "thinning operations" subject to environmental review and public comment? Which "old growth Ponderosa Pine will remain uncut"? Where are these acres located? What stand analysis data exist for these designations? What definition criteria of "old growth" is being used by the BLM Strip District prior to implementing "thinning operations"? | 26

Page IV-41 From Forestry (Concern 1-6)
QUESTIONS: Again, commercial treatments are implied. How are "additional benefits" provided "through understory improvement" of Ponderosa Pine? What is a "new growth Ponderosa Pine in the forest"? What federal criteria are used for this definition? Please give a definition of "new growth Ponderosa Pine in the forest"? What federal criteria are used for this definition? Please give a definition of "new growth Ponderosa Pine", its basal area, stems per acre and age somewhere within the document before using the definition in the EA. | 27

Page IV-42 From Special Designations Paragraphs 1 and 2
COMMENT: Agree strongly.

CONCLUSION: (Concerns 1-6)
QUESTION AND COMMENT: What level of "management of Ponderosa Pine forests" are you intending? The document is unclear on this point throughout the EA with regards to Alternative 2. | 28

Page IV-44 From Forestry (Concerns 1-6)
QUESTIONS: What "increases in noise and dust, as well as sudden, visible change to the forests", are going to occur in Alternative NO. 2 if the Ponderosa Pine areas are to be "maintained for other uses"? What "forest enhancement operations" are you referring to? Does Alternative NO. 2 not manage the forest for other uses? If so why are you referring to "forest enhancement"? Does this not imply forestry practices for the sake of commercial interests? | 29

Page IV-48 From Forestry (Concerns 1-6)
QUESTIONS: Both paragraphs are inconsistent with other portions of this document. Why is "mitigation" necessary for visuals when the Ponderosa Pine is managed for other uses? Are visuals another use? If so, would visuals not be included in any assessment of the need for treatment and the treatment used to enhance not reduce visual quality? | 30

05-257 (continued)

25. A number of wildlife species are closely tied in their habitat preferences needs to old growth stands. Maintaining old growth stands in a healthy condition long range, will help maintain suitable habitat conditions for those dependent wildlife species.

26. Selective thinning is a practice which may be used to enhance the health, vigor, regeneration or natural biodiversity of the forest ecosystem or benefit resources such as wildlife. Guidelines for thinning operations will be defined in plans to be developed for the Mt. Trumbull and Parashant Resource Conservation Areas (see response 05-257-15). Our intent is to have a multi-interest advisory group assist in developing the plans with full opportunity for public review. Environmental review will also be involved.

27. In some portions of the ponderosa pine forest an exceptionally thick understory has developed which, according to BLM wildlife biologists, can be improved as wildlife habitat through thinning or prescribed burns. New growth ponderosa pine refers to seedlings and other young age classes that would be established as part of the forest regeneration process. No specific criteria have been established with regard to basal area or stems per acre.

28. We will implement an active carefully designed long-range program directed toward managing, maintaining and protecting ponderosa pine forests and their associated ecosystem. The specifics of management will be developed in plans to be prepared for the Mt. Trumbull and Parashant areas.

29. The forest management operations referred to may include: (1) selective thinning necessary for the health, vigor, regeneration or biological diversity of the area or beneficial to wildlife resources; (2) Disease and insect control; (3) prescribed burns; (4) prescribed management of naturally occurring fires; (5) reduction of fuels; (6) rehabilitation of burned areas, and; (7) salvage harvest in burned areas and insect kill sites. The associated impacts will be addressed in EAs associated with plans to be developed for the Mt. Trumbull and Parashant Resource Conservation Areas. The focus of the proposed action is on forest management for the enhancement of other uses. The referenced section on impacts has been rewritten for clarification.

30. Visual resources are an integral consideration in management of the forests because these areas are important public recreation areas, and aesthetics are a key component of the back country recreation experience. Accordingly, because visual resource management classes have been designated, aesthetics need to be factored into the consideration of treatment practices. Mitigation is involved because multiple use requires diverse tradeoff considerations and measures need to be established to ensure protection of the key resources or values present.

05-257 (continued)

Page IV-50 Paragraph number 3 (Concerns 1-6)
QUESTION: Again the term "forest management... of the Ponderosa Pine" is used. The statement also implies that the "health of the Ponderosa Pine is a management objective in Alternative NO. 2 -- Is this true? | 31

Page IV-52 From Forestry
COMMENT: Agree with last sentence of this paragraph.

Page IV-53 From Special Designations
QUESTION: What are "lumber objectives"? Can this definition be included in the glossary portion of the RMP? | 32

GRAZING MANAGEMENT

Concern No. 1:

Management of the Parashant Resource Conservation Area (RCA) as proposed in Alternative 2. According to the RMP, there are 135 livestock permittees and 164 grazing allotments within the District.

The Parashant RCA would be used, essentially, as an "emergency" pasture where situations such as fire, vegetative treatment, or rest of pastures in other allotments is needed. With the large number of allotments on the District, it is likely that one or more of these conditions will exist within the RMP area continuously through time. It is conceivable that the Parashant RCA could be used continuously, without rest, for long periods of time. This is not a desirable situation.

Concern No. 2:

It appears that use of Alternative 3 would preclude the establishment of the Parashant RCA. According to the RMP, Table II-2, Page II-47, other values such as wildlife habitat, and recreation are also important uses of this RCA. Apparently, grazing by livestock is considered THE important use. We do not agree. This area could be managed as an RCA with these other uses being of primary importance and not as a "release valve" for livestock grazing that is supposedly managed under a comprehensive grazing EIS and associated AMP's.

31. Health of the ponderosa pine ecosystem is an objective of the forest management program.

32. The term "lumber objectives", as used in the draft RMP/EIS, means the objectives of accommodating full scale commercial oriented timber harvest operations to provide the nation's need for lumber and the wide variety of purposes for which it can be used. This term has been deleted from this document so the definition has not been put into the glossary.

WILDLIFE RESOURCES

Concern No. 1:

Lack of commitment within the RMP that existing Habitat Management Plans (HMP's) and current revisions of these plans be retained as the guiding documents in management of wildlife within the RMP framework.

Concern No. 2:

Lack of adequate documentation or references that desert bighorn sheep (Ovis canadensis nelsoni)or pronghorn antelope (Antilocapra americana) populations cooperatively (1961-1985) reestablished to native historic ranges pose such an overpopulation threat to other resources as to require the Bureau of Land Management to "adjust to the optimum" these species numbers without reference to the legally empowered agency (Arizona Game and Fish Department) through which these species numbers may be "adjusted to the optimum" only after interagency coordination. 33

Concern No. 3:

Lack of adequate documentation or reference that the bighorn sheep or pronghorn antelope numbers, referred to by reestablishment area in the various HMP documents, are now or were ever intended to be maximum management numbers. Were they in fact minimum population reestablishment thresholds from which to manage upward? 34

Concern No. 4:

The use of set population numbers for bighorn sheep and pronghorn antelope populations in lieu of management for viable populations based on habitat capability and distribution.

Concern No. 5:

The use of the dates June 1 to November 1 for deferral of disturbance factors for bighorn sheep lambing and lamb rearing. The dates of February 1 through September 1 would be more appropriate for this area. 35

05-257 (continued)

33. The RMP makes no references to antelope or bighorn sheep numbers posing an overpopulation threat to other resources. Close cooperation between the Arizona Game & Fish Department (AGFD) and BLM is essential to determine and manage for optimum numbers of wildlife since the AGFD has wildlife management authority and BLM has the responsibility of managing the habitat on public lands.

34. The numbers identified in habitat management plans were not intended to be maximum management numbers. Wildlife numbers identified in these plans are typically short-term estimates of what would be required to establish, in the long run, a viable population within a given habitat area.

35. As per input from the Arizona Game & Fish Department, the dates for deferral of disturbance factors for bighorn sheep lambing and rearing have been changed to December 1 - May 31.

We hope that our comments will be beneficial in providing changes which we feel will enhance this document. Our concerns can be incorporated while still meeting your objectives for multiple-use management.

We would like to thank you for the time and effort evident in the preparation of this plan and also for our opportunity to be involved in the process.

Sincerely,

for Ray Lee, President

David L Walker PRESIDENT-ELECT

RL:DLW:GR

cc: Sam Spillier, US Fish and Wildlife Service
Duane Shroufe, Arizona Game and Fish Department

The Nature Conservancy

The Arizona Nature Conservancy
300 East University Boulevard. Suite 230. Tucson, Arizona 85705
(602) 622-3861

G. William Lamb 18 May, 1990
District Manager
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Lamb,

Thank you for the opportunity to comment on your draft Resource Management Plan for the Arizona Strip District. Our comments are directed to the management of rare and endangered plant and animal species, and of sensitive natural communities. We are particularly concerned with the management of Areas of Critical Environmental Concern and riparian areas.

Areas of Critical Environmental Concern:

We strongly support the designation of the ACEC's identified in the preferred alternative (Alt. 2) to protect sensitive species and habitats. However, the management prescriptions presented in Alt. 2 are not adequate to assure the protection of these areas, and we recommend implementing the more protective management prescriptions presented in Alternative 3. The ACEC's represent the most important ecological resources of the district, and they occupy only a little over 2 percent of the district's land. Clearly, these small but important areas require the best protection possible.

In general, the abbreviated presentation of ACEC prescriptions in tabular format, with different aspects of the ACEC's treated in the text and in the appendix, is confusing and inadequate. The purpose of ACEC designation is to provide the highest quality BLM resources with management specifically tailored to the management needs of those resources and to perceived threats to those resources. The RMP lacks a discussion of how the proposed management prescriptions for each ACEC are specifically related to the resources the ACEC's are supposed to protect. In several cases the proposed management prescriptions are not sufficient to protect those resources.

Those ACEC's that are identified for protection of sensitive plants, Ft. Pierce, Marble Canyon, Johnson Spring, Lost Spring Mtn., and Moonshine Ridge, should all be closed to mineral entry and to surface occupancy. The single major threat to these areas is possible mining development, so without closure to mineral entry and surface occupancy designation of the ACEC's is essentially meaningless. Closure to mineral entry will not pose

05-258 (continued)

a major conflict with current mining interests because these areas are almost completely free of mining claims, as indicated by the mining claim map in the draft RMP. Lack of claims also suggests that mineral resources of commercial value are unlikely to exist in these areas, because the Strip has been well surveyed for minerals.

All of the ACEC's should be closed to ORV access, with the exception of existing roads, and no new road construction should be permitted.

The Ft. Pierce ACEC is identified to address problems of soil erosion, and to coordinate management of the federally listed Pediocactus sileri across the Utah state line. The RMP states that 23,560 acres of severe and critical erosion are found in the area. The preferred alternative calls for only 900 acres in the ACEC, and does not extend the ACEC boundary up to the Utah border. I suggest that the goals of the ACEC, as stated in the RMP, call for the boundaries to include at least the 3,600 acres identified in Alternative 3, and they should extend up to the Utah line to connect with the special management area there for the Siler Pincushion Cactus.

The Paria Plateau ACEC, the only ACEC proposed in Alternative 4, was found to be ineligible for ACEC designation, as discussed in Appendix 6. If it was found to be ineligible for ACEC status, Paria Plateau should not be presented as an ACEC alternative.

In both the Beaver Dam Slope and Virgin River ACECs one of the single biggest threats to the resources being protected is extensive, surface disturbing activities such as gravel quarrying or mining. In addition to posting a Plan of Operation and performing mitigation activities, as you suggest in the RMP, mining operators in these areas should be required to restore the sites to original condition after completing mining activities, as is required for temporary roads in these areas. Mining operators should be required to post a bond to guarantee that these restoration activities are performed.

Nowhere in the RMP are the exact locations and boundaries of the proposed ACECs described, and the map of special management areas is of too small a scale to accurately show where the boundaries are. I suggest including a table that provides the legal descriptions of the ACECs. 1

Threatened and Endangered Species:

The list of sensitive species considered in the RMP should include the Northern Goshawk (Accipiter gentilis) which may be found in the Ponderosa Pine forest of Mt. Trumbell, as well as Welsh's Milkweed (Asclepias welshii) which is known from sand dunes on the Paria Plateau. Welsh's Milkweed is a federally listed Threatened species. 2

1. Legal descriptions have not yet been developed for the special management areas. Exact boundaries for the special management areas and the associated legal descriptions will be developed during the preparation of management plans specific to each of these areas. Approval of the plans will be subject to the completion of an EA which will be available to the public for review.

2. The northern goshawk is listed in Appendix 12. Welsh's milkweed has been added to the list in Appendix 13.

05-258 (continued)

In the list of sensitive plant species on the district on page A-54 several plant names are incorrectly spelled. These include: Enceliopsis nudicaulis, Naked-stemmed Sunray, Asclepias cryptoceras, Cryptantha capitata, Sclerocactus spinosior, Antirrhinum kingii, Selaginella, and Alpine Spike Moss. 3

We support your plan to perform demographic monitoring of population structure for sensitive plants on the ACEC's. However, a sampling frequency of three times per year for detailed, time-consuming work such as this is probably unrealistic and unnecessary. For long-lived plants such as cacti population sampling once per year is sufficient.

Riparian Areas:

We strongly support protective management of riparian areas, particularly the Virgin River ACEC with its numerous rare and sensitive species of fish and plants. We strongly support the concept of a demonstration riparian management area at the confluence of the Beaver Dam Wash and Virgin River as you describe in Alternative 3. We feel that the BLM should acquire additional land in these important areas to provide more consistent management for the sensitive riparian and aquatic habitats.

We feel that riparian areas should be more strongly emphasized in the RMP due to their disproportionately high resource value. Some very small, isolated areas such as small streams and springs can have significant resource values that may need special management attention; for example the plant Camissonia exilis, a candidate for listing, is known only from small springs on the Arizona Strip. A table listing the important riparian habitats and their status, such as whether or not they have been inventoried, are they being monitored, what is their trend, etc., would be very useful.

Grazing:

We feel that grazing, the most widespread land use on the district, should have been addressed as a key issue in this RMP/EIS. The two previous documents dealing with grazing on the Strip, the Vermillion Grazing EIS (1989) and Shivwits Grazing EIS (1980), are now both more than ten years old and are out of date. New information that has developed in the last ten years with regard to the effectiveness of the current grazing plans, improvement or lack thereof in range condition, and particularly the relationship between grazing and threatened and endangered species, should be discussed to complete the RMP.

3. The corrections on spelling have been made.

Maps:

We found the maps very difficult to read due to their small scale and lack of landmarks. These maps could be improved substantially by printing them at a larger scale, with a standard topographic base map for background. They could then be included in pockets at the back, rather than bound into the document. The vegetation map was especially difficult to understand and lacks any description of the mapping units, for example, what is the difference between "wasteland" and "barren land"? 4

Thank you, once again, for opportunity to comment on the draft RMP. If I can be of further assistance, please feel free to contact me.

Sincerely,

Peter L. Warren

Peter L. Warren
Public Lands Protection Planner

05-258 (continued)

4. The maps are being redone to facilitate public understanding and utility.

G R A N D C A N Y O N T R U S T

BOARD OF DIRECTORS

James Trees
Chairman
Edward M. Norton, Jr.
President
Harriet Hunt Burgess
Secretary-Treasurer
Bruce Babbitt
Anne K. Bingaman
Bert Fingerhut
David H. Getches
John D. Leshy
Chase N. Peterson
Sally A. Ranney
John P. Schaefer
William B. Smart
Stewart L. Udall

Jim Ruch
Executive Vice President

May 21, 1990

Dennis Curtis, Team Leader
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dennis,

Here are the official comments of the Grand Canyon Trust on the Draft Resource Management Plan for the Arizona Strip District.

Thank you very much for the extra effort that you went to in providing us with information about the District and this Draft Plan. Also, the efforts that were made by the District to assure public input into this Plan, including special meetings, open houses, and the extension of time for comments are much appreciated.

I hope that these comments and recommendations will be useful -- and used -- in the development of the final RMP and decision. Please call me if you have any questions or if you would like clarification of any of these points. I would much prefer to take the time now to be certain that we have a full understanding which will lead to the best decision, rather than have to try to go back and fix something that is not quite right just because we were not perfectly clear in explaining an issue or recommendation.

We did not ask our members or other audiences to undertaken a large letter writing campaign on this RMP. As we explained, there are a lot of people who feel very strongly about the Strip and making sure that the right kind of a plan is in place to guide its management. These comments represent their views, as I think you know.

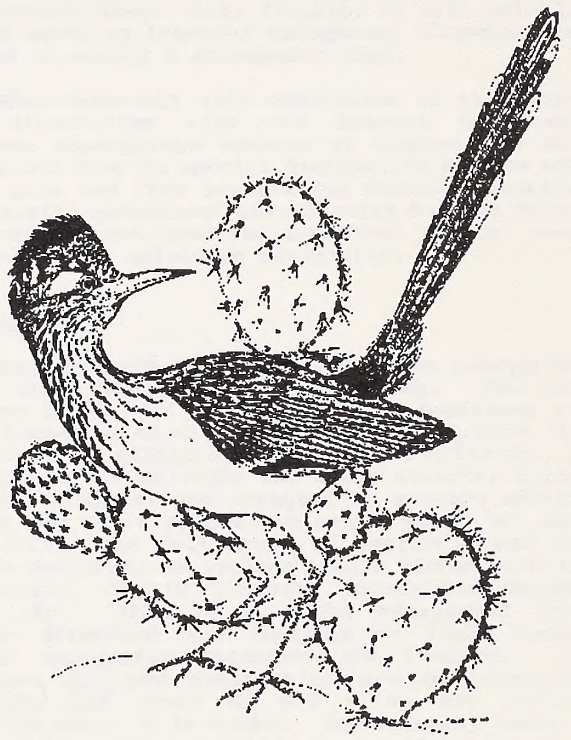
We look forward to working with you to complete the RMP, and more importantly, to assure its full and effective implementation.

Sincerely,

Jim Ruch
Executive Vice President

cc: Ed Norton

Headquarters Office: "The Homestead," Route 4, Box 718, Flagstaff, Arizona 86001 (602) 774-7488 FAX (602) 774-7570
Washington Office: 1400 16th Street, N.W., Suite 300, Washington, D.C. 20036 (202) 797-5429



05-259 (continued)

GRAND CANYON TRUST

Comments and Recommendations

on the

BUREAU OF LAND MANAGEMENT'S

DRAFT ARIZONA Strip DISTRICT

RESOURCE MANAGEMENT PLAN

The following comments and recommendations on the Draft Resource Management Plan for the Arizona Strip District of the Bureau of Land Management are made on behalf of the Grand Canyon Trust, a private non-profit organization advocating the responsible conservation of the natural resources of the Colorado Plateau. We want to thank the District Manager, the RMP team, the staff of the District and the members of the District Advisory Board Council who have gone out of their way to seek public input in the development of this land use plan.

REMOTENESS

The Arizona Strip is a remarkable and unique place. Made up almost entirely of public land, it is isolated physically from the rest of the State of Arizona. It is a land surrounded by beautiful and exceptional places, Grand Canyon National Park, Glen Canyon and Lake Mead National Recreation areas, Zion National Park; and yet the Strip is extraordinary in its own right. It is both rich and little known culturally, historically and geologically. It is at once stark and scenically splendid. But, most importantly, with a minimum of paved highways and access points, it is wonderfully remote with the special opportunity for experiencing both a sense of adventure and a closeness to natural surroundings for those who take the effort to go there. The draft resource Management Plan shows an understanding of the importance of preserving the remoteness that is the hallmark of the "Strip." This position must be maintained and fully defended in the final decision on this RMP.

RECOMMENDATION: The overriding priority of "remoteness" with the opportunity for solitude and a sense of adventure as management criteria should be incorporated in all management direction within the RMP. This should be strengthened and affirmed as a statement of general management direction. 1

1. One of the main objectives of the proposed RMP is to maintain the open space, scenic character and remoteness of public lands. This objective stated on page II-2. This objective is reflected in many of the proposed decisions, such as recreation, visual resource management, off highway vehicle designations, and the special reclamation stipulations found in Appendix 5.

SPECIAL LEGISLATIVE DESIGNATION

In fact, the opportunity to maintain and manage such a large and significant contiguous block of public land in ways that protect and enhance its remoteness requires greater recognition than is possible in a Resource Management Plan. The public interest in the Arizona Strip certainly supports national legislation creating special recognition for this area.

Congress has already made manifest its interest in and concern for the special management needs of the Arizona Strip. In 1984 the legislative history of the bill that created wilderness on the Strip, H.R. 4707, contains numerous references to the remarkable natural values of the area, and repeatedly expresses an intent that lands not designated as wilderness be given special management attention to assure that these values are protected. The report from the House Committee on Interior and Insular Affairs states, "...Arizona Strip lands have been cut off from access... and to this day have remained very remote, wild, and largely unsettled. With the exception of ranching, limited mining, and some tourism, very little commercial activity took place prior to the recent upswing in exploration for uranium resources. As a result, the Arizona Strip abounds in the type of primitive, undeveloped and unconfined terrain that are well suited to wilderness designation."

That Report goes on to comment on management needs for lands that are not being included in specific wilderness proposals. For example, relative to the Grand Wash Cliffs proposal it says, "In leaving these lands open for mineral exploration and potential development the Committee emphasizes that this is an environmentally sensitive area that should be managed by the Bureau of Land Management to minimize adverse impacts on the current remote and wild values."

Legislative designation, such as a National Conservation Area should include both the Arizona Strip District of the BLM and the North Kaibab National Forest lying north of the Grand Canyon and wholly contained within the Strip. It could also recognize the essential integrity of the Arizona Strip with the adjoining Grand Canyon and Glen Canyon and Lake Mead National Recreation areas and provide for cooperative and mutually protective resource management for these adjoining lands.

Legislation establishing an Arizona Strip National Conservation Area is needed for several reasons. First, it recognizes the unique values of the area for outdoor recreation and establishes a framework for protection of those values within a multiple use and sustained yield context in the same way that was done for the California Desert Conservation Area created in the Federal Land Management and Policy Act. Second, it is needed to provide the legislative direction and authority to manage mining on the public

lands properly. (This will be more fully discussed in the comments on mining.) Third, in recognizing the importance of the values of the Arizona Strip, it will encourage the management capability, staffing, resource investment, and interagency cooperation required to manage this important area. And, finally, it will establish a more permanent and enduring intended management direction in law than can be assured in simply a management plan.

RECOMMENDATION: Simultaneously with completion of this RMP, BLM should initiate discussions with the Arizona Congressional delegation and other appropriate members of Congress to develop legislation which would provide special designation for the Arizona Strip. Both this plan and that legislation should recognize and facilitate the effective management coordination between different land managing agencies based upon the important natural resource relationships across their adjoining boundaries.

"A" AND "B" ZONE CONCEPT

The essential management approach of this RMP is to categorize all the lands on the Strip district into two zones. The acreage assigned to the two zones, "A" or "B", and the locations of the zones vary from alternative to alternative. Lands in zone "A" are managed under standard BLM multiple use management criteria. Lands in zone "B" are managed for multiple use under stricter criteria, standards or special stipulations designed to provide additional care or protection for their special values. These "A" and "B" designations cut across the full range of resources and are in addition to special designations such as ACEC's (Areas of Critical Environmental Concern), SRMA'S (Special Recreation Management Areas), and the like. This is a useful management tool in providing priority direction and emphasis to field managers, particularly since management resources are limited. It is unfortunate, however, that such designations are not recognized in regulatory authority and hence do not allow for additional regulatory protection where it is needed. Consequently these zones must be overlaid with other special designations where such regulatory protection is required to assure the authority to implement management decisions. This issue will be discussed under our comments on mining where it is particularly important.

As described on page II-2 of the Draft RMP, "Area B includes land identified by the public and BLM as having unique resource values and special management needs." In keeping with that definition and the criteria for zone "B" areas that follows, there is no question that all of the lands included in the "B" zone in alternative 3 as shown on map II-2 should be included under that designation. They would not have been identified by BLM resource specialists or public land user groups for such designation if they had not contained special values. They comprise 895,000 acres,

approximately 35% of the total area of the District. Since the purpose of this designation is to include those areas which need management emphasis, it makes no sense to exclude lands which have been identified as needing such emphasis from the "B" designation. Therefore the final RMP should include all the lands in the "B" zone which are included in Alternative 3.

RECOMMENDATION: The Final RMP should include in the "B" zone all the areas shown in the map II-2 on page II-51 of the Draft RMP, totalling 895,000 acres. 2

MINING

Of all the issues on the Arizona Strip District, mining - including mineral development and related land disturbing activities, has created the most controversy in recent years. The reason for this is obvious. The impact of ongoing mineral activities in a remote area can be significant while operations are underway, but where enforceable standards and requirements for operations and more importantly for rehabilitation upon conclusion of mining are inadequate the impacts can be overwhelming and unfortunately permanent. Such is the case on the Arizona Strip as it is elsewhere on public lands managed by BLM. This is true because of the essential flaws in the anachronistic Mining Law of 1872, because of the failure of the Department of the Interior's mining regulations to provide adequate controls or enforcement provisions even within the framework of the law, and because of BLM's policy of reluctance to assert adequate management control over mining activities on the lands for which it is responsible. The recommendations made in these comments will suggest ways to better manage the impacts of mining activity on other resources on the Strip, and it is essential that these be included in the final RMP. Nonetheless they are limited measures and a legislative action, such as the previously recommended National Conservation Area designation, is needed to effect fully appropriate management of mining on the public lands of the Arizona Strip.

Fortunately, most of the recent mining activity on the Arizona Strip has involved breccia pipe uranium mining which has been conducted to a standard of operation and rehabilitation well beyond anything required by BLM. It is interesting to note that the company conducting these mining operations, Energy Fuels Nuclear, has implemented a higher standard of operation and reclamation at exploratory sites and at mines that have been closed (Hacks Canyon) than have been required. Encouraged by the BLM managers on the Strip District, in fact, EFN has complied with Congressional directives as contained in the previously mentioned Report on the Arizona Strip Wilderness Act of 1984. That direction is clearly stated, for example: "The Committee also understands that the development of the mineral resources will mean construction of some

05-259 (continued)

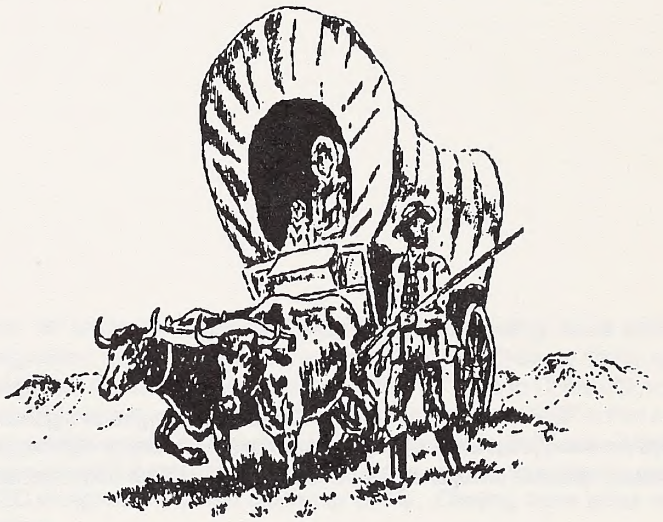
2. The "B" areas and associated guidelines were used to guide management decisions. They are not designations with specific management prescriptions, but the management decision in the RMP reflect these guidelines. The areas managed under area "B" guidelines has been expanded in the proposed RMP, based on public comment. See text changes on page II-3 and Map II-1.

new roads, powerlines, etc. The Committee strongly encourages the BLM to manage the development of these resources as sensitively as practicable, balancing environmental and development concerns. Developmental activities should be viewed as temporary, to be fully reclaimed once the mineral resources are extracted. In this way, the impacts to the natural values the Committee has identified within these lower cliffs will be minimized."

Such compliance must not be left to chance. It would be both unfair to a company like EFN and contrary to legislative direction for BLM to require less. There is no reason that these standards cannot or should not be incorporated as requirements in this RMP. The need for this is obvious. Much of the opposition to additional mining on the Arizona Strip exists because the concerned public has no guarantees that the resources or values with which they are concerned will be protected! It is too much to ask them to accept the good faith of future unknown BLM managers or to be content that future unknown mining companies will protect those resources out of the goodness of their hearts. Now is the time to assure, through required standards and performance criteria, the future protection of the special public resources of the Arizona Strip.

Under existing BLM regulations no management oversight at all is provided where mining operations disturb less than 5 acres, except where lands have been placed under certain special designation, such as an ACEC. This is a problem that should be pointed out in the RMP which should also recommend regulation changes to overcome it. Because of this regulatory problem simply placing lands in zone "B" does not provide protection against impacts covering less than 5 acres. Consequently special designations will need to be applied wherever the protection afforded by regulatory criteria and management oversight are required. One such special designation, the closure of an area to off road vehicle use, offers a very logical and appropriate way to address this issue. This will be discussed in more detail under that heading.

An alternative to such designations which is often proposed where limiting the impact from mining is essential, is the "withdrawal" of land from the operation of the mining laws. Unfortunately this action by itself will not completely achieve its objective since it only halts the filing of new mining claims, not the development and operation of valid existing claims. Since most of the lands on the Strip are covered with existing claims, blanket withdrawals alone will not be completely effective. It is important that the validity of existing claims not be simply conceded. In areas where mining should be precluded, rather than simply well managed, withdrawals make sense, particularly if BLM will initiate validity determinations in connection with any proposed plan of operations, a process which ultimately can clear mining claims from an area. However such withdrawals must also be accompanied by special designations which require an approved plan of operations for any



mining activity regardless of the acreage to be disturbed.

RECOMMENDATION: The "guidelines" listed as "Reclamation Stipulations" in Appendix 5 on page A-13 of the Draft RMP should be restated as requirements and applied as specific standards and criteria which must be met for approved mining operations on the Arizona Strip District. The enforcement of these requirements should be emphasized as general direction for management under the plan. 3

The use of the special designation "Closed to Off Road Vehicle Use" is discussed under the ORV heading. In areas so designated special stipulations and conditions will apply including a blanket requirement for plans of operations regardless of the size of the mining activity.

The areas proposed for withdrawal in the RMP within special designation areas are discussed and recommendations made under the special designations section of this document. In those areas proposed for withdrawal, under the recommended management prescriptions, the stipulation requiring validity examinations should be included, with the requirement that any plan of operations submitted for mining activity on a mining claim in these areas will initiate a validity determination by BLM.

ACCESS, ROADS, AND OFF ROAD VEHICLES

In keeping with the priority of "remoteness" the decision not to upgrade any roads in the Strip is excellent. The present main route high quality gravel access roads provide all of the high grade access that is needed, and the network of secondary dirt and gravel roads are more than sufficient. In fact, significant numbers of these secondary roads, particularly in the "B" zone are not needed for administrative or public purposes and should be closed.

In the Zone "A" areas vehicles should be designated as "limited to existing roads and trails". The management strategy in Appendix 22 on page A-70 for these areas should be changed to require that a map and photos be prepared and maintained so that any increase in the road or trails can be responded to quickly. This monitoring should be required. Ongoing efforts should be made to eliminate any roads that are not necessary.

All of the zone "B" areas should be designated "closed to off road vehicles". Within these areas all roads that are needed for public and administrative access should be established as "designated road corridors". This is a significant change from the recommendation from the proposed designation in the plan "limited to designated roads and trails". It is essential in order provide for adequate

05-259 (continued)

3. The reclamation stipulations in Appendix 5 have been revised. However, requiring all the stipulations in all circumstances is not practical because of the various site specific conditions that may exist.

05-259 (continued)

management of mining operations. Under the current mining regulations (3809.1-4-b-5) plans of operations for all mining activities are required in areas designated as "closed" to off-road Vehicles. This does not prohibit designating road corridors through these areas, nor does it prohibit the use of vehicles, under permits, off those roads where properly allowed under a plan of operations, or appropriate permission of the authorized officer.

Over the long term this will require a mapping and signing program that combines information about the road system and the rules for vehicle use with education about the importance of minimizing the impact from roads and vehicles and the value of remoteness.

It is appropriate to provide some small, carefully selected open areas for off road vehicle play near communities where this kind of use is in demand. The emphasis here is on "carefully selected". There appears to be a problem with the proposed open area near Fredonia where it overlaps with the range of a sensitive plant species (pediocactus). Obviously that would be an unacceptable situation, hence the need to screen these ORV open use areas very carefully. These areas must be established with clear and enforceable boundaries and with care regarding their impact on adjacent areas.

RECOMMENDATION: No new roads or permanent road upgrade should be allowed on the District. Area "A" should be designated "limited to existing roads and trails". Area"B" should be designated "closed" to off road vehicles with designated road corridors. Carefully selected open ORV play areas should be established with sensitivity to on site and adjacent resources near communities where needed. 4

LIVESTOCK GRAZING

The Draft RMP does not propose changes in the livestock grazing program from the present management approach which was developed under the Grazing EIS's completed over 10 years ago in 1979 and 1980. This is not appropriate since the RMP alternatives include decisions which could affect, and probably should change, some grazing management decisions. Unfortunately, this RMP does not contain adequate information to evaluate and make a full range of recommendations. Therefore these comments must be limited to some general proposals.

The background of the current grazing program is important in understanding these comments. The grazing EIS's were completed over a decade ago and implemented during the early 1980's. Two key factors influenced that implementation. The first was a significant shift in range management policy in BLM which reduced

4. Most "A" areas are included in the "limited to existing roads and trails" OHV designation. Most "B" areas are either closed to OHVs or OHVs are limited to designated roads and trails. Closing all the "B" land to OHVs with roads needed for public use left open, would differ from the proposed RMP in that a mining plan of operation would be required for any motorized OHV use. Most areas with special/sensitive resource values and steep canyon topography are included in ACEC designations or are closed to OHVs. Closing more areas would not be justified.

the agency's on the ground oversight capability and placed great emphasis on analyzing progress and future changes through monitoring conditions. The new policy also shifted much of the responsibility for monitoring to the ranchers themselves. Secondly, rainfall in the early 1980's was significantly above average and range conditions benefitted accordingly. Recent years have been exceptionally dry, however, and the limited evidence available indicates enough range problems to cause concern. Many ranchers are taking significant voluntary non-use, and others are being encouraged to reduce numbers and alter turn outs.

There is some evidence of improvement in certain places. Some of the special riparian management areas are listed as showing improvement. The emphasis placed on riparian values in the RMP is good, but it is not yet adequate. There is nothing in the RMP to require that changes in allotment plans be made to meet the objectives established for these riparian areas. There are many springs, for example, that need to be added as areas to be given special management protection for their riparian values. In some areas, such as the Paria Canyon there are indications that improvement is taking place, but it is slow, and in some places such as the Wilson ranch area in the Lee's Ferry allotment there are still real concerns about the impact of livestock use. The intent of the RMP is encouraging, but it also indicates that a hard look should be taken across the board at the grazing program before it is given blanket approval as direction for the future in this RMP.

The drastic reductions in the mule deer herds in the western part of the Strip may be an indication of a problem. So too could be the limited success of the pronghorn antelope program. This RMP should make a commitment for BLM to review the rangeland management program jointly with the Arizona Game and Fish Department and to adjust future grazing activities in accordance with the findings of that review. That review should specifically look at the opportunities to optimize wildlife water and riparian habitat in connection with range water projects throughout the Strip. There have been some real benefits to wildlife from range water improvement projects including spring development, wells, windmills, tanks and the like, but there is considerably greater potential benefit that could be realized from such an effort undertaken jointly by BLM with rancher permitees and wildlife interests. 5

The implications of zone "B" management prescriptions and special designation areas such as ACEC's etc. on the grazing program are not clear in the RMP. Special designation areas will require implementation plans and these could affect grazing in those areas. How this will relate to approved or developing allotment management plans is not clear in the EIS. This is a matter of some concern particularly since a significant majority of the allotments on the 6

05-259 (continued)

5. BLM meets formerly with State Game and Fish officials at least once a year. In these meetings, existing HMP are reviewed and discussed. There are objectives in these HMPs to provide habitat for specific numbers of animals. At the present time, a special meeting to just discuss the mule deer problems is being considered.

6. Areas A and B and associated guidelines were used to guide development of the resource management alternatives. They are not special management areas or designations, but were used to help ensure consistent management in specific geographic areas. The implication to grazing will be restriction or mitigation on road making, and new range management facilities. For example, no new permanent roads would be allowed to build range facilities. Also, OHV would be limited to designated roads and trails or closed.

05-259 (continued)

Strip (94 out of 164) are in the "season long" or "less intensive" management categories.

These issues need to be addressed in the EIS. BLM should commit to a complete review of Allotment Management Plans at least throughout the "B" zone wherever there are special designations to assure that the grazing system and plan are consistent with the desired management and maintenance of the special resources in the area.

RECOMMENDATIONS: The RMP should provide criteria for, and commit to the review of all allotment management plans in zone "B" and special designation areas over the next five years with adjustments made as needed to manage the designated resources in accordance with management objectives for these areas. The RMP should also require an immediate and periodic overall review of the grazing program monitoring results and affirm the criteria which require changes in grazing management systems. Finally the RMP should establish a joint BLM - Arizona Game and Fish Department review of the potential wildlife enhancement opportunities through rangeland water development improvements. 7

RECREATION

The emphasis on managing outdoor recreation in keeping with the extraordinary values of remoteness and adventure to be found on the Arizona Strip is one of the highlights of this RMP. In many ways this is the most difficult kind of outdoor recreation to manage simply because of its dispersed nature and its values which require a less intrusive form of management than that in concentrated, crowded recreation areas. One of the most common concerns in remote recreation management involves the protection of special sites and values from the impact of thoughtless or careless users who misuse or abuse special places, leave trash and litter, drive off roads and the like. For this reason some would argue against identifying certain special places such as archaeological sites, wildlife areas and the like as ACEC's because that might attract people to those areas and they would be degraded. Such arguments are rarely valid. People do discover such places on their own and without the special protection, public concern, and agency support for their management, interpretation and care damage can and will occur often even without detection.

The element that is missing from the RMP is enough emphasis on the management capability and staffing levels that are needed to provide reasonable direction, management, service, interpretation and education for visitors in the area. This emphasis deserves great focus in the implementation plan for the RMP but the stage needs to be set in this plan document itself. A sufficient staff

7. When the RMP is finalized, an implementation plan will be prepared. In this plan all existing activity plans (AMPs, HMPs, watershed plans, etc.) will be reviewed and changes needed to bring these plans into conformance with the RMP identified. Grazing allotments are reviewed on a planned schedule to determine if the objectives of the AMP are being met.

of BLM rangers whose primary job is visitor service and who have full law enforcement authority is essential on the Arizona Strip. This must be stated in the plan.

Another element that is not discussed adequately in the plan is the relationship between the kind of access and facilities that will be available on the Strip itself, and the need for more intensive recreation centers, including such things as campgrounds, full service RV parks, motels, and appropriate guided tour and trip facilities stressing trail oriented activities such as hikes, mountain bikes, horseback riding, and jeep tours on designated roads. Such facilities developed on private lands along the paved highway, could support and at the same time protect, the values of the public lands for dispersed recreation. There should be a discussion of this potential and evidence of its being discussed with local communities such as Kanab, Fredonia, Hurricane, and the Kaibab Paiute Tribe who might see the opportunity for environmentally sensitive economic development in providing such facilities.

RECOMMENDATION: Field visitor service law enforcement needs related to the recreation program should be discussed in the RMP. The requirement for field law enforcement capability must be included under the Law enforcement section of the RMP. The demand for adjacent intensive recreation development should be pointed out and evidence provided that this has been discussed with the adjacent communities. Areas deserving of special designation should not be deleted because of fear of visitor impact resulting from that designation, rather appropriate levels of recreation management should be identified and recommended. 8

WATERSHED MANAGEMENT

As much area is proposed to be disturbed under this RMP for watershed management as for range management. Thus, it is assumed that on these acres the objectives are for basic soil protection, water conservation, erosion reduction, and vegetative and wildlife diversity and productivity rather than producing grass for livestock grazing. These are valid objectives, particularly where they contemplate returning lands to conditions that existed prior to the intensive grazing and total fire protection practices which probably have led to such things as nearly sterile dense stands of pinyon juniper forests on former grass predominant lands. Unfortunately past vegetative management practices have frequently been both unsuccessful and destructive of other values including everything from soil stability to visual appearance.

At the present time BLM is considering its entire vegetative management program and an EIS on that program is under review.

05-259 (continued)

8. Specific law enforcement needs to carry out the proposed RMP will be identified in the next step of our planning process, preparation of an implementation plan. This type of detail is not generally included in an RMP.

05-259 (continued)

Arizona Strip RMP Comments - 11

Therefore it is hard to judge what the impacts of the Arizona Strip alternatives will be. Current usage of chemicals for killing sagebrush, pinyon and juniper is experimental at best and the long active life of such products on the ground is a cause for concern. Prescribed burning raises issues of smoke and visibility. The tools that may be available to BLM and the frequency and intensity of their use is not yet determined. On the Arizona Strip vegetative manipulation should be undertaken with a maximum of sensitivity to its potential impact, both short and long term on the special values of remoteness and recreation that the area provides. Special techniques that are site specific and take advantage of the right soils, aspects, and slopes such as Pinyon Juniper pushing rather that chaining should be employed. A commitment to criteria which would require this sensitivity in planning and implementing vegetative manipulation projects should be included in the RMP.

RECOMMENDATION; Include criteria for vegetative manipulation projects, at least in all "B" zone areas, which are sensitive to site specific values, and which are likely to be effective without damaging soils, needlessly destroying vegetation or wildlife habitat, harming archaeological resources, or impairing scenic values or the sense of remoteness. 9

SPECIAL DESIGNATION AREAS

It is obvious that a great deal of effort has gone into analyzing and proposing management prescriptions for many of the special and unique places on the Arizona Strip in the preparation of this Draft RMP. In reviewing the document it is sometimes hard to determine just how those prescriptions will apply since they are spread out among two different tables (II-1 and II-2) in different formats and different categories. Also, there was no clear description of what an SRMA and an RCA are, and what the real differences are between them. Generally speaking it appears that except for the Paria Plateau there are only small difference in size on a few areas, and mineral withdrawals that differentiate ACEC's between Alternative 2 and 3. Management under an RCA seems to differ from an SRMA only in that it provides less intensive recreation facilities and management. There are a number of small springs on the Arizona Strip which deserve special designation and protection but which are not included under any of the following areas. Red Rock and Middle Spring are good examples. These deserve special attention under the riparian habitat section of the RMP and must be recognized and protected in connection with grazing, watershed management and any land disturbing activities.The following 10 11

9. Vegetation manipulation would be constrained by the various decisions in the proposed plan. These proposals would also be consistent with the Bureau's Programmatic EIS on Vegetation Treatment on BLM Lands (1990).

10. Definitions for SRMA and RCA have been added to the glossary to facilitate understanding.

11. Red Rock and Middle Spring, along with some 350 other small springs and seeps on the Arizona Strip, have been inventoried for their riparian resource values. They have riparian areas ranging from a few square feet to several acres. Consideration was given to ACEC designation on several of the more significant springs, but they did not meet the relevance and importance guidelines for designation.

    Water rights on many of these springs are privately owned even though located on public land. Management is complicated by this arrangement.

    All wet areas meeting the definition of riparian areas are managed under the BLM and Arizona Riparian Management Policy. Although they do not have special designation, they do have special management attention. Improved management is evident in many of these areas.

05-259 (continued)

Arizona Strip RMP Comments - 12

recommendations are provided briefly for each of the areas considered for special designations.

RECOMMENDATIONS:

Beaver Dam Slope - Designate as ACEC with Alternative 3 prescriptions. Block up lands of better tortoise habitat. Do not sell or relinquish any lands within tortoise habitat, and if lands are exchanged for public purposes, the lands acquired should be better tortoise habitat than the exchanged federal lands. Proceed with the 120 acre riparian demonstration area. | 12

Virgin River Corridor - Designate as ACEC with Alternative 3 prescriptions, including wild and scenic river classification. | 13

Little Black Mountain - Designate as ACEC under Alternative 3 prescriptions. Develop an intensive interpretation program as soon as possible. | 14

Fort Pierce - Designate 3,600 acre area as an ACEC with Alternative 2 management prescriptions. | 15

Marble Canyon - Designate 15,500 acres as an ACEC with Alternative 3 management prescriptions except that low maintenance on roads and camping at overlooks could continue. Access would be on designated roads only. | 16

Johnson Spring, Lost Spring Mt., and Moonshine Ridge - Designate 17,800 acres as ACEC's with Alternative 3 management prescriptions. | 17

Witch Pool and Nampaweap - Designate as ACEC's under Alternative 3 management prescriptions. | 18

Paria Plateau - The Paria Plateau is an extraordinary resource and special designation should not be limited because we do not yet fully know all of the values it contains. In fact this argues for the most protective category. On the Paria Plateau 186,600 acres should be designated as an ACEC within a 227,000 acre SRMA under Alternative 3 prescriptions. Proceed with the wild and scenic river designation for the Paria River. Improved ranger services are needed. Coordinate the location, stationing, and supervision of rangers with the BLM Kanab Resource Area in Utah to provide the most effective and efficient visitor services for this superb area. | 19

Parashant Area - Designate 51,000 acres as an RCA under Alternative 2 prescriptions. Proceed to introduce the Kaibab Squirrel. Be certain to reserve the grazing for emergency situations at BLM's discretion only to be used only if such grazing will not disturb or impact the other values for which the area is managed. | 20

05-259 (continued)

12. The proposed plan includes the Beaver Dam Slope ACEC which is primarily for the protection of the desert tortoise. Closure to mineral entry, the primary difference between Alternative 3 and the proposed alternative in the draft RMP/EIS, is not incorporated as a stipulation in the proposed plan but the ACEC designation does require mining exploration and exploration entities to file a Plan of Operations with BLM for activities beyond casual use. This will help ensure that activities are conducted in a manner that prevents undue or unnecessary degradation, provides protection of non-mineral resources and provides for appropriate rehabilitation of disturbed areas.

13. The proposed plan calls for an 8,100-acre ACEC in the Virgin River Corridor, including further study for possible designation as a scenic and wild river. the management prescriptions adopted are the same as the preferred alternative in the draft RMP/EIS rather than Alternative 3.

14. The proposed plan calls for a 200-acre ACEC on the Little Black Mountain Site. The management prescriptions adopted are the same as the preferred alternative in the draft RMP/EIS. An intensive interpretation program is already underway and a fence has been constructed to restrict vehicle access and associated damage to the site.

15. The proposed plan calls for a 900-acre Fort Pierce ACEC. The recommended increase in size is considered inadvisable since that would result in unnecessary restrictions on multiple public uses. In addition, the majority of lands classified as slightly saline soils would have off-highway vehicles limited to designated roads and trails.

16. The proposed plan calls for a 10,700-acre Marble Canyon ACEC with the same management prescriptions shown in the preferred alternative of the draft RMP/EIS. The additional acreage (4,800) provided for in Alternative 3 of the draft RMP/EIS was for Pediocactus peeblesianus var. fickeiseniae, a Category 1 special status. Recent studies show that this cactus is more abundant than previously thought so the expanded ACEC is not necessary. The 10,700-acres originally proposed for the Marble Canyon ACEC and the associated management prescription and stipulations provide appropriate protection for the listed Pedicactus bradyi which occurs in that area.

17. Johnson Spring, Lost Spring Mountain and Moonshine Ridge would all be designated as ACECs as part of the proposed plan, primarily for the protection of cultural resources and endangered cacti. The ACEC acreages are 2,400, 9,800 and 5,500 respectively or a total of 15,700 acres. Alternative 2 management prescriptions were adopted which involve appropriate measures for the management of the areas and protection of the special resources which warranted designation as ACECs.

05-259 (continued)

Arizona Strip RMP Comments - 13

Mt. Trumbull Area - Designate 108,000 acres as an RCA under Alternative 2 prescriptions. Note, however the recommendations in this document under Forest and Watershed management and be certain they are applied. Also, do provide non-intrusive interpretation opportunities for cultural sites in this area and encourage volunteer interest in these sites. 21

Kanab Creek and Tributaries - This area needs to be reconsidered for ACEC status, particularly in light of the special values and requirements for special management placed on it by Congress in 1984. It appears that it was dropped from ACEC consideration in the RMP process because it has potential for mineral resources in breccia pipes. As pointed out in the Congressional report, well managed mining activity of that type is not inconsistent with special management and designation. Look at the Hack Canyon mine site rehabilitation. Therefore, this area should be designated at a minimum as an RCA under Alternative 2 prescriptions. 22

Andrus and Dansil Canyons and Parashant Canyons - These Canyons deserve special designation due both to their remote recreational attractiveness and unique combination of scenery and scarce water sources. Therefore, they should be designated as an RCA under general Alternative 2 prescriptions. 23

Southern Grand Wash Cliffs - Congress, although it did not put this area into wilderness, clearly directed that it receive special management attention. Therefore it should be designated as an RCA under general Alternative 2 prescriptions. 24

VISUAL RESOURCES AND SCENIC VALUES

The RMP recommendations for these resources are appropriate and should be implemented. The visual resource management class designations by acreage for Alternative 3 should be followed and implemented. Special attention should be paid to the lands that form the scenic backdrop south of St. George and Hurricane. From the Hurricane Cliffs west to the Paiute/Beaver Dam Wilderness Area lands in this viewshed should be carefully managed to protect them from visual scarring from vegetation management, surface soil disturbance, unsightly corridor developments or construction activities.

RECOMMENDATION: Provide additional emphasis in the RMP on protecting the viewshed to the south of St. George. 25

FOREST AND WOODLAND MANAGEMENT

A commodity commercial timber production program is not appropriate on the Arizona Strip District. Although some limited amount of

18. The proposed plan calls for designation of both Witch Pool and Nampaweap as ACECs. The management prescriptions adopted are from the preferred alternative of the draft RMP/EIS.

19. See general response to public comments page V-7.

20. As per this recommendation, the proposed plan calls for the Parashant Area to be designated and managed as an RCA. Possible introduction of the Kaibab Squirrel will be considered, but is an action which requires coordination with the U.S. Park Service and the Arizona Game & Fish Department. The intent is to use the area for livestock grazing only for emergency situations or when substantial resource management benefits can be realized.

21. Consistent with this recommendation, 108,000 acres in the Mt. Trumbull area outside of the wilderness areas will be designated and managed as an RCA.

22. See general response to public comments page V-6

23. See general response to public comments page V-7.

24. We have reviewed the Southern Grand Wash Cliffs to determine if designation as RCA is warranted. We recognize their value for back country recreation and scenery as outlined in the House Report on the 1984 Arizona Wilderness Act. We have concluded that these cliffs and canyons do not have important overlapping resource values as defined for a RCA. We are planning on limiting OHV activity in the Southern Grand Wash Cliffs and Hidden Canyon to designated roads and trails to protect and maintain the scenic values and remoteness of the area.

25. See change in Maps II-1, II-2, II-5, II-12, and II-15.

commercial saw log timber, both second growth and old growth exists on the District, particularly in the Mount Trumbull/Mt. Logan area, it is vastly more valuable for the recreation experience and public enjoyment than it is for any timber value it may have. There is a need, however, for some forest management practices to maintain and protect these forest land values. In some places the dense, unthinned understory and ground fuels buildup poses a serious threat of catastrophic wildfire. It is appropriate in such places to consider commercial removal of the small trees that are creating the problem, but only if the objectives of such removal are absolutely clear. Those objectives should be to optimize the recreational quality, wildlife habitat, destructive wildfire prevention, and biodiversity of the area. The management goal should be for an "ancient forest". Under no circumstances should the "economic necessity" of any contractor commercially thinning or removing forest materials under such a program, allow the removal of any "old growth" trees. The public concern here is that any "foot in the door" by a commercial forest enterprise will inevitably lead to economic and political pressures for taking, "just a few" of the extremely valuable big trees "before they just become decadent, rot, die, and fall over." If there is any possibility of this happening, then no commercial operation should be allowed at all.

26

RECOMMENDATION: Adopt the draft proposal for alternatives 2 & 3 with the proviso that forest management must be based on optimizing recreation values and biodiversity. Commercial operations to remove material that is creating a wildfire hazard should only be allowed if they fully guarantee and protect the old growth direction, values and aspect of the forest.

<u>WASTE MANAGEMENT AND HAZARDOUS MATERIALS</u>

The RMP is unfortunately silent on the subject of waste management, pollution prevention and hazardous materials. This is not surprising, since BLM policy on these issues is currently inadequate at best. Still, there are important items to be added regarding management on the Strip. The importance is pointed up by the recent Arizona Strip Advisory Board action expressing concern about potential air, water, and visibility problems that could be caused if a project under consideration to build a hazardous waste incinerator on the Kaibab Paiute reservation is approved. The RMP does address an intent to manage the impact of smoke from prescribed burning and to control dust in connection with mining operations and road hauling. However the relationship of public lands to waste management and disposal needs of adjacent

05-259 (continued)

26. See general response to public comments page V-9.

05-259 (continued)

communities is not discussed at all, nor is the potential impact of increased heavy traffic transporting hazardous materials across public lands on the Strip.

RECOMMENDATION: The section on hazardous materials in the RMP should be expanded to include all waste management and pollution prevention issues and proposed actions. A waste disposal/hazardous material inventory should be required and management plan prepared and implemented in cooperation with the appropriate federal, state and local agencies. This does not have to be completed prior to finalizing the RMP, but it must be committed to in the RMP. 27

LAND TENURE ADJUSTMENTS

The acquisition of 147,000 acres of State lands, primarily through exchange is a sound proposal and should be implemented as soon as possible. This exchange program is a tribute to both BLM and the State of Arizona, and its positive effects on public land management at both levels are outstanding. The recommendation under Alternative 2 for the proposed airport at Ferry Swale is a good one. It has been expanded by the District Advisory Board Council to require a regional analysis of air transportation and airport needs. This is exactly the right approach to take. The Navajo Nation should be very much involved in that analysis.

RECOMMENDATION: Proceed with the 147,000 acre State Land exchange. Implement the Advisory Council recommendation on the Airport at Ferry Swale.

RELATIONSHIP WITH ADJACENT PUBLIC LANDS

The recent management leadership of the Arizona Strip District has been sensitive to the needs of adjacent public land agencies including the National Park Service at Grand Canyon National Park and Lake Mead and Glen Canyon National Recreation Areas, the U.S. Forest Service at the North Kaibab National Forest, and the State Lands of the State of Arizona. This sensitivity has also extended to the lands of the Kaibab Paiute Reservation and other adjacent indian reservations. Many meetings have taken place between these agencies and special working groups have been set up to coordinate issues such as recreation management, prescribed burning, livestock management plans, and wildlife issues among other. The Draft RMP does not document this level of coordination, nor does it reflect involvement of these other agencies and entities in the planning process. This must be corrected in the final RMP. BLM is required by law to consider these concerns as well as the plans and concerns of State and Local Government agencies. If necessary further consultation should take place to assure that these needs and 28

27. The hazardous materials program is primarily issue driven, responding to accidents, abandonments or dumping of hazardous materials on public lands.

    Additional responsibilities resulting from recent and proposed legislation and regulations include:

    a. Participation with the lands program in audits of all landfills to determine compliance with federal and state solid waste regulations promulgated under Subtitle D of the Resource Conservation and Recovery Act and changes needed to comply with RCRA and pending legislation for present and future landfills.

    b. Participation with the lands and soil, water and air programs in selecting proper sites for future landfills before they are sold to users.

    c. Evaluation of monitoring data, gathered by responsible parties, to assess possible soil, water or air contamination.

    d. Evaluation of actions on lands contiguous to the Arizona Strip for their potential pollution effects on soil, water and air resources of the district.

    e. Evaluation of plans which involve the continuous transport of large quantities of specific hazardous waste across the Arizona Strip or across watersheds which drain into the district.

    f. Evaluation of all lands to be acquired, prior to acquisition, for possible hazardous material sites. Ensuring cleanup of sites by responsible parties before exchange.

    g. Evaluation of plans for all actions on the Arizona Strip for any potential hazardous material concerns.

28. See response 04-03-02.

concerns are expressed, understood and responded to; and the RMP should document what the District has done in this regard. If any actions are recommended in the Final RMP which are contrary to the expressed interest of these other agencies or entities, the RMP must explain why alternative choices are made. Because the Arizona Strip District borders significant BLM managed lands in Utah, which is administered under another State Office, similar coordination should be taking place with the adjacent BLM districts and areas. The coordination that has taken place is not clear in the Draft RMP. For example, coordination is essential for proper recreation management of the Paria Canyon area, and it is not clear that the recommendation for a Pine Pockets Ranger Station is a joint recommendation of the Kanab and Vermillion Resource Areas. This may be a reflection of the distance involved for the Vermillion Resource Area people who are stationed in St. George. If the area were detached and located in Fredonia or Page they would be much better placed for management and coordination purposes. 28 (cont.)

RECOMMENDATION: Assure and document proper consultation, coordination with, and consideration of the needs of adjacent public land managing agencies, local communities and Indian Reservations in the RMP. Consider the detachment of the Vermillion Resource Area Office to Fredonia or Page and include in the RMP implementation plan.

05-259 (continued)



THE STATE OF ARIZONA

GAME & FISH DEPARTMENT

2222 West Greenway Road, Phoenix, Arizona 85023 (602) 942-3000

Governor
Rose Mofford

Commissioners:
Frances W. Werner, Tucson, Chair
Thomas G. Woods, Jr., Phoenix
Phillip W. Ashcroft, Eagar
Gordon K. Whiting, Klondyke
Larry Taylor, Yuma

Director
Duane L. Shroufe

Deputy Director
Thomas W. Spalding

May 21, 1990

Mr. G. William Lamb, District Manager
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Lamb:

Re: Arizona Strip District Draft Resource Management Plan (RMP) and Environmental Impact Statement

The Arizona Game and Fish Department appreciates the effort put forward by the Bureau of Land Management (BLM) in the preparation of the Arizona Strip District RMP. The task of creating a document of this scope and magnitude was obviously a difficult one. Overall, we believe that the Draft RMP has resulted in a thorough and comprehensive review of alternative management directions for the Arizona Strip.

We have provided some general comments and concerns below, and our specific, page-referenced comments are listed in Attachment 1. We believe that these comments and recommendations will enhance this document, and we hope that they will be given due consideration in preparation of the final RMP.

Although our Department generally supports the management direction outlined in Alternative 2 (the BLM's preferred alternative), we have major concerns with some of the specific management recommendations contained in this alternative. We believe that a combination of management direction from Alternatives 2 and 3 should be considered as the best approach in the final RMP.

Our Department is opposed to the commercial harvest of remnant ponderosa pine stands on the Arizona Strip. These limited areas of ponderosa pine habitat serve as unique island refuges for ponderosa pine-dependent species and those species which depend on large, old trees. We believe that any short-term benefits from commercial harvest on the Arizona Strip will be far outweighed by the serious long-term adverse impacts that this management prescription would have on species dependent on the ponderosa pine vegetation type.

Most of the wildlife work on the Strip District has been based on Habitat Management Plans (HMP's). Despite the importance of the HMP's to all types of management activities, these plans are hardly mentioned in the RMP. As we stated during the scoping process for the RMP, we consider the HMP Program, as it currently exists, to be a valid program. Furthermore, we do not believe the RMP should, in any way, restrict or compromise the implementation of these highly-valued planning documents. We look forward to continued cooperation with the BLM on the implementation of HMP's, and we would like to see them specifically referenced in the RMP.

The Arizona Game and Fish Department appreciates the opportunity to review and comment on this RMP. We remain committed to working closely with the BLM in its efforts to improve management of wildlife habitats throughout the Arizona Strip District. This RMP is a critical part of the overall planning process which will ensure the success of balanced multiple-use resource management on the Arizona Strip.

Sincerely,

Duane L. Shroufe
Director

DLS:DLW:lkl

cc: Arizona State Director, BLM, Phoenix, AZ

05-260 (continued)

ATTACHMENT 1.

Specific Comments

The following specific comments will follow the format in Table II-1 (Pages II-8 to II-38) of the Draft RMP:

Issue/Resource: Land Resources
Change Agent-Ownership Adjustments (Page II-9)

We support paragraph 2 of Alternative 3 regarding retention of desert tortoise habitat.

Issue/Resource: Mineral Resources
Change Agent-Leasing Categories (O and G) (Pages II-2 and II-13)

We support Alternative 32, but would add: No oil and gas leasing on Category 1 desert tortoise habitat (map II-16).

Change Agent-Mining Law (Page II-13)

We support Alternative 3, but would stipulate no exploration or development on Category I desert tortoise habitat.

Issue/Resource: Special Status Species
Change Agent-Animals (Page II-19)

We support Alternative 3, with the following additions and changes:

The Beaver Dam Slope has low to moderate mineral values, but extremely high habitat values for desert tortoise. We recommend closing the Beaver Dam ACEC (Page II-39) to any mineral exploration or leasing, to protect habitat for desert tortoise. The development of existing mining claims should be prevented in order to protect tortoise habitat. No new road construction should be allowed.

The Virgin River Corridor ACEC (Page II-39) will be important to the protection of three special category fishes, the woundfin (Plagopterus argentissimus), the Virgin spinedace (Lepidomeda mollispinus mollispinus), and the Virgin roundtail chub (Gila robusta seminuda).

We recommend closing this ACEC to fluid mineral exploration and leasing. In addition, no existing mining claims should be developed. No new road construction should be allowed.

Issue/Resource: Riparian Areas
Change Agent-Designations (Page II-21)

We support Alternative 3, with the Virgin River confluence area as a Riparian Demonstration Area.



05-260 (continued)

Issue/Resource: Forest Woodland Resources
Change Agent-Forests-Management Direction (Pages II-21, 22 & 23)

We are strongly opposed to the authorization of commercial timber harvest on any portion of the Strip District where remnant stands of old-growth ponderosa pine still exist. We believe that the minor amount of timber volume currently existing on the Strip District, if harvested, would not justify the potential for significant detrimental impacts to the wildlife which is dependent on this habitat type. The limited acres of ponderosa pine on the Arizona Strip are unique and extremely valuable as island refuges for species dependent on ponderosa pine.

The potential impacts of the proposed tree harvesting are underestimated in the RMP. We are especially concerned with the lack of adequate documentation in the RMP relating to the following items: 1) Sufficient soil inventory and mapping data; 2) Silvicultural stand exams which show that federally-mandated commercial pine regeneration standards can be met; 3) Sufficient wildlife inventories for special category species; and 4) Identification of the boundaries of old-growth stands to be cut and those to be retained. These items must be addressed before harvest of ponderosa pine is permitted.

We believe that natural regeneration would not be adequate to sustain commercial harvest and that cutting in these areas would result in accelerated invasion of pinyon-juniper and eventual type conversion. These areas of ponderosa pine should be managed for wildlife, recreation, and visuals, not timber harvest.

Furthermore, the ponderosa pine forest on the Parashant is currently occupied by a small, but expanding Merriam's turkey population. The limited stands of ponderosa pine should be primarily managed for the benefit of turkeys, which will benefit other wildlife and recreational uses as well. Many current timber practices are in direct conflict with management for turkey roosting sites, and other critical habitat areas (Mollohan, 1989). Examples of management prescriptions which would benefit turkeys are as follows:

1. Roost trees should be protected and are usually the largest, most dominant trees in the area. Large trees with relatively open crowns and flat horizontal branches are preferred. Preference should be given to established roosts.

2. Grazing should be limited in and adjacent to ponderosa stands to avoid over-utilization of herbaceous vegetation which is important to turkeys.

3. Nesting areas should emphasize stand characteristics with uneven ages, including trees of 4"-12" dbh, and multi-storied stands with uneven tree distribution. Stands should have moderate to heavy deciduous or conifer regeneration or shrub densities, with uneven distribution.

1

1. The ponderosa pine forests are recognized as a unique and important component of the public lands of the Arizona Strip District. In addition to providing biological diversity, these limited areas of ponderosa pine are valuable habitat for a variety of wildlife. In recognition of such values, the forested areas have been designated for management Category C which means that forest management is for the enhancement of other uses rather than focused on commercial forestry, timber management or timber harvest. This decision reflects the fact that management not only needs to be directed to long-term maintenance and protection of the forest ecosystem, but also to maintaining important associated values such as wildlife habitat and recreation.

   The active forest management plan intended does need to be carefully designed and implemented for the reasons stated in the Arizona Game & Fish Department (AGFD) comments as well as other multiple use considerations. The intent is to develop, with the assistance of a multi-interest advisory group, a forest management program as part of an overall management plan for the Mt. Trumbull and Parashant Resource Conservation Areas. Involvement by the AGFD in that effort is basic, particularly because of the wildlife values involved and wildlife habitat management and efforts to enhance habitat conditions are integral components of this program. The recommended management prescriptions to benefit turkeys, comments on reduction of ground fuel buildup and silvicultural treatments and needed inventories are good examples of considerations which need to be incorporated into the development of plans for the Resource Conservation Areas.

05-260 (continued)

4. We generally support Alternative 2, but any timber management plans should be carefully coordinated with the Arizona Game and Fish Department. Of special concern would be the over-ambitious "reduction of ground fire fuel buildup." This could reduce important cover, nesting habitat, and food sources for turkeys and other wildlife. Habitat improvement for turkeys via silvicultural treatment should be accomplished as wildlife improvement projects, rather than through commercial timber sales. Because of the relatively small magnitude of such projects, we believe that this would be a better vehicle for accomplishing such goals.

1 (cont.)

Issue/Resource: Grazing Management
Change Agent-Management Direction (Page II-25)

Alternative 2 is the preferred management prescription (Page II-47), but we oppose the use of the Parashant as a "relief pasture", under the specified guidelines in the RMP. Conceivably, the Parashant could be subjected to grazing yearly to "relieve emergency situations in other allotments." We are especially concerned with grazing within or adjacent to the ponderosa stands on the Parashant which could negatively impact the expanding turkey population.

We encourage the update and revision of the Shivwits Grazing EIS, especially upon finalization of the RMP.

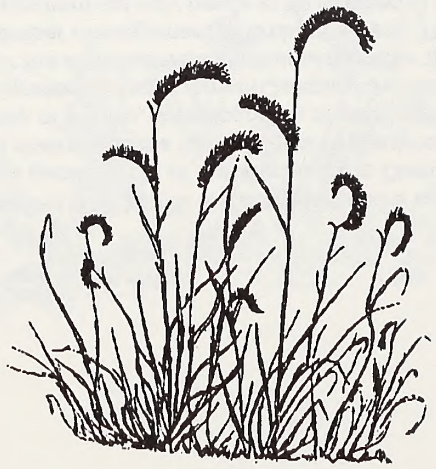
Forage competition with domestic livestock has been implicated as one of the factors causing a decline in tortoise numbers throughout their range. We encourage the cessation of grazing on Category I desert tortoise habitat, and suggest the priority development of AMP's for other allotments where tortoise are found to aid in the recovery of the species.

Issue/Resource: Wildlife Resources
Change Agent-Bighorn Sheep and Antelope

The population numbers originally established in the HMP's for antelope and bighorn sheep were intended as minimum levels for the reintroductions to be considered successful. These numbers are now being treated as maximums. We recommend establishing an objective range, such as 175-300 sheep on the Vermillion Cliffs.

Change Agent-Changes in Kind of Livestock (Pages II-26 & II-27)

We support Alternative 2, but recommend deleting "unless monitoring studies and research indicates a problem does not exist." There should be no change in kind of livestock actions, except to remove domestic sheep from or adjacent to bighorn sheep-occupied habitats.



05-260 (continued)

Issue/Resource: Fire Management

The extensive "stands" of interior chaparral found on Black Rock Mountain and the Virgin Mountains are largely old and decadent, precluding wildlife movement and utilization. Chaparral is recognized by ecologists as a "fire dependent" plant community which responds to fire by rapidly sprouting and recovering within a decade or two. Prescribed burns in these areas would open up the chaparral and produce a diversification of forage species. Fire is an important natural occurrence in chaparral plant communities, which can dramatically improve range conditions.

We encourage prescribed burns and "let burn" policies within most chaparral vegetation on the Black Rock and Virgin Mountains.

Issue/Resource: Wild Free-Roaming Burros (Page II-25)

We recommend that all burros be intensively managed and/or removed from areas not occupied by burros prior to 1971, from Category I desert tortoise habitat, and those lands identified as critical bighorn sheep habitat (e.g. lambing grounds), especially on the Beaver Dam Slope and Grand Wash Cliffs, respectively.

Other specific comments or corrections are recommended or provided as follows:

Issue/Resource: Wildlife Resources
Alternative 2, Lambing Activities (Page II-27)

Lambing period should be changed from "June 1 - November 30" to December 1 - May 31, inclusive. | 2

Impacts to Wildlife Resources from Mineral Resources and Exploration and Development (Page IV-41) and Impacts to Mineral Resources from Special Status Animals and Other Wildlife Resources (Page IV-32)

We recommend that all mineral or oil and gas-exploration activities also be restricted in critical antelope habitat, during the antelope fawning period from March 1 to June 30, inclusive. | 3

Special Status Animal Species (Pages III-18 & 19)

Woundfin Minnow, Page 18, first paragraph, second sentence - change "downstream to Lake Mead" to "downstream to Mesquite, Nevada." | 4

Change "Virgin River Roundtail Chub" to Virgin Roundtail Chub. Also, this species is no longer a proposed species. It was listed as Endangered on September 25, 1989. Same changes are also noted for Appendix 16 (Page A-56), Appendix 28 (Page A-77), and Table IV-2 (Page IV-9). | 5

2. The dates have been changed. See text page II-27.

3. Crucial pronghorn antelope habitat on the Arizona Strip has not been delineated. Fawning areas and seasonal herd movements are generally defined. Stipulations to mitigate impacts to antelope would be developed during the EA review process for Plans of Operation and Applications for Permit to Drill.

4. Corrections made, page III-16.

5. Corrections made, pages A-52 and A-72.

05-260 (continued)

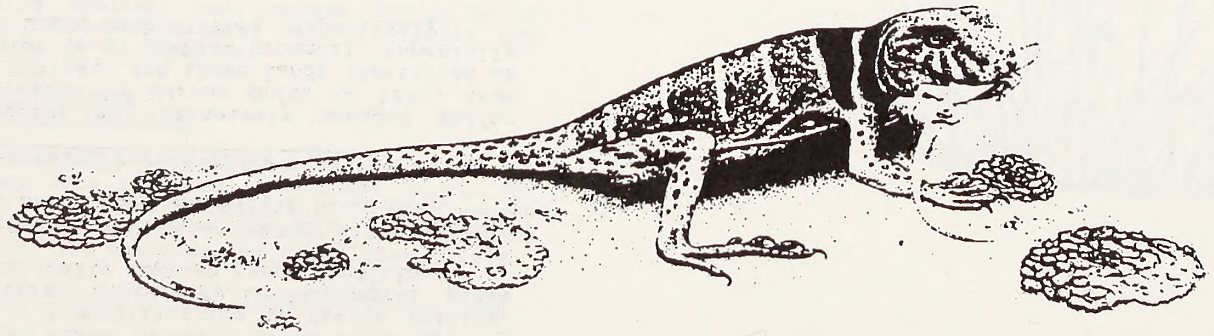
Change listing for desert tortoise from endangered to threatened. This species was officially listed as Threatened on April 2, 1990. Same changes also noted for Appendix 16 (Page A-56, Appendix 28 (page A-77), Table IV-2 (Page IV-19), and in the Summary of Impacts by Alternative: Cumulative Impacts; Biological Components (Page S-18). | 6

6. Corrections made, pages A-52 and A-72.

References:

Mollohan, Cheryl, 1989. Wild Turkey Habitat Requirements. Arizona Game and Fish Department Draft Guidelines, Habitat Section. 6pp. | 7

7. Reference added.



May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Howard L Rowell
P.O. Box 88
Blanding, Utah
84511

V-349

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Jerry Hockaday
PO Box 502
Blanding Ut 84511

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

In the Resource Management Plan draft I feel that you have failed to include the needs of those who have depended upon the resources of the Arizona Strip for a great number of years.

Maintaining cooperative relations and programs with land users should be a district objective. This is a commendable objective bcause it is the resource users who provide both the tools and finances for management. More emphasis should be given to their role and more priority placed on keeping them involved.

Many of the users of the Strip have been involved in resource use all their lives. Their desires and needs should be reviewed and considered more thoroughly. The preferred alternative presently discourges traditional roles by placing restrictions on common practices. There may be some changes needed in the district, but the users need to be more fully taken into account. After such an examination, I am sure that you will realize that alternative 4, with modifications allowing for multiple use, is the preferred management method.

Thank you,

Vicki Thomas
Box 21
Kanab UT 84741

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I believe that those who have developed the natural resources on the Arizona Strip have done nothing but make improvements to this area. Great emphasis has been placed on reclaiming the land after mining operations have been carried out. Livestock producers pioneered the area and developed water and made fences to control use of grazing.

If this area is allowed to become wilderness, many people will suffer. Without this type of water development, the land would become very much a desert with very few kinds of large game animals dispersed throughout the area. Jobs will be lost. Livestock producers will be forced to thin down their heards, or they may be forced out of the business altogether.

And what will be the result of all this? A vast desert area that no one wants to use, not even for remoteness recreation. Consider what the consequences would be before making any final decisions. I support alternative 4 with consessions made to continue multiple use of the Arizona Strip District.

I also recommend that Logan and Trumbull, Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits be managed for Multiple Use. RCA's, SMRA's, and other restrictions to Multiple Use should not be employed.

Thank you,

Valerie Barnes
Box 438
Fredonia, Ariz
86022

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am concerned that there seems to be a trend of taking much of our productive land, and tieing it up into wilderess. A great deal of study must be undertaken before such a change is made. Setting aside this land is not always the best approach to a difficult situation. Wilderness designation is not always in the best interest of the District or its inhabitants.

The Resource Management Plan draft seems to overempasize the need for more wilderness area. With such an emphasis on remoteness, wildlife may suffer. The Arizona Strip provides only limited habitat without water and range improvements. Without developed tanks and guzzlers, few animals could survive the harsh conditions. Roads and trails need to be maintained and perhaps at times opened to allow access for management activities.

We need to keep these lands open for the good of all. I feel that adapting alternative 4 and making alterations in it allowing Logan and Trumbull, Parashant and Black Rock Mountins, woodland areas, and areas now under livestock permits to remain multiple use areas. This is the way for us to receive the best overall use of the Arizona Strip District.

Thank-you,

Eric Dan

V-351

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

After reading the draft of the Resource Management Plan for the Arizona Strip District, I am deeply concerned about our future in this area. I feel that Alternatives 2 & 3 are unrealistic. The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. After the review period, I hope that the BLM feels that Alternative 4 should be selected.

I want opportunities for jobs for my children and I want to remain in my home. Without this, we cannot exist in this area. I don't feel that government should have the right to jeopardize my job and the privilege of supporting my family.

We need multiple use of our lands. We need to develop our resources and to provide an economic base for this area. If we continually lock up our lands, then we cannot develop our resources. I support Alternative 4.

Sincerely,

Gilbert Clark

May 15, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read with great interest the Resource Management Plan draft for the Arizona Strip. One of the few statements you make in this draft that I agree with is "The population which resides within or adjacent to the district believes that economic development is needed. This develpment, it is perceived, would tend to stabilize employment and increase income. To this end, there appears to be widespread local support for increased activities related to manufacturing, construction, and mining." (page III-40)

I feel that the majority of the people would agree with this statement. However, I don't feel that the RMP emphasizes enough the need for future development on the Arizona Strip. The economic wellbeing of the local communities is tenuous at best. Don't make a bad situation worse by locking us out of our own lands.

For example, the following areas should be managed for Multiple Use and Placed in Area A - Category A: Unikaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits. In addition, the Paria Plateau should be managed for Multiple Use. ACEC and SRMA designations are inappropriate as it would essentially put a buffer against the existing wilderness resulting in defacto wilderness. Such areas have already been eliminated from study, and the actual wilderness, with no buffers, has been approved by congress.

I feel that Alternative 4 is the only feasible approach to the management of the District. Concessions should be made to emphasize multiple use of our public lands. Let's keep them open for the use of the people.

Thank you,

W. L. Cotherman
P.O. Box 513
Kanab Utah 84741

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

No one knows what the future holds in store. We can undertake studies and look at past trends, but as of yet, no one has been able to actually know what lies in store for us in the future.

Because of this, we are told to plan ahead. Save for a rainy day. That is what has taken place on the Arizona Strip. If alternatives 2 or 3 are adopted from the RMP draft, all this planning and preparation will have been in vain. Negative impacts will arise by using the restrictive actions called for in the RMP. A need for development or action may surface in the future that is beyond our view at this point of time. If our hands are tied now, we may not be able to meet our future needs.

Before these actions can occur, they must go through the public process. I am against these restrictive actions and am making my opinion heard. I believe the alternative 4 is the least restrictive, and I am in support of adopting it.

I also believe the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values could be accomplished just as effectivey by less restrictive management prescriptions.

Thank you,

Orla Blake
P.O. Box 1277
Kanab, Utah 84741

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I feel that it is important that we manage our public lands in a manner which recognizes the nation's need for domestic sources of energy, minerals, and livestock products. The local and regional economic state is greatly affected by the way our public lands are managed.

The Resource Management Plan draft for the Arizona Strip is not in harmony with this idea. The BLM seems to feel that wilderness management is more important than multiple use management. I hope that you will listen to the voice of the people before changes are made that could have a devastating effect on the communities surrounding the Arizona Strip.

The following areas should be managed for Multiple Use and placed in Area A - Category A: Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits. In addition, the Paria Plateau should be managed for Multiple Use. ACEC and SRMA designations are inappropriate as they would essentially put a buffer against the existing wilderness resulting in defacto wilderness.

Alternative 4 comes closest to representing the preferences and concerns of local individuals and companies. It would continue to allow use of our natural resources through multiple use management.

Thank you,

J.R. Blake
5926 Zion Dr.
Kanab, Ut

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I agree with Governor Bangerter's statement concerning environmental policy. He said, "The best environmentalists are those who have lived on the land. They have made the land produce and preserved it for future generations." It seems that the enviromentalists that are putting the must pressure on for remoteness management are very selfish. They want this land all to themselves.

Our responsibility to the land is to make improvements. We have seen these improvements made on the Arizona Strip. Watersheds, fencing, and roads have been developed and an area that seemed almost desolate has "blossemed like a rose." I have reviewed a copy of the Resource Management Plan draft for the Arizona Strip. Give us the opportunity to continue using this public land. For example, the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateaus and Canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river would only result in creating a buffer zone around the wilderness area.

I support Alternative 4 with the elimination of Paria Plateaus and Canyons as an ACEC.

Sincerely,

Richard Cottam
1504 S. Highway 89A
Kanab, Utah
84741

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After reading through the Resource Management Plan draft for the Arizona Strip District, I am aware that additional restrictions are unnecessarily being requested. Care of special status species is mandated by "higher" regulations than the RMP. There needs to be no further provisions to protect an item of concern when there is already mandated requirements. This seems to be a surrogate to not only protect something specific, but to exclude various uses of this area.

The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains wilderness area. Closing the Plateau and canyon to mineral location and woodland product sales or designating the Paria River an scenic river are unnecessary. Protection of the area's various values (cultural, recreational, etc.) could be accomplished just as effectively by less restrictive management methods.

The needs of the majority need to be taken into account. It is important that we continue to benefit from the resources on the Arizona Strip. Regulations have already been mandated for protection of these areas of concern. Let them function the way that they were intended. I support alternative four of the RMP draft.

Thank you,

Cindy White
266 W 200 N
Kanab Utah
84741

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Ben Johnson
P.O. Box 23
Fredonia, AZ
86022

May 20, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have reviewed the Resource Management Plan for the Arizona Strip. I have some fears about your taking 452,800 acres of this area and designating it as wilderness. Currently, I believe that you are in favor of Alternative 2. By adopting this alternative, we are putting too much restriction on this area. Alternative 4 would allow us to continue developing the natural resources of this area. It is important that when the final documents are estabished, that they stress multiple use. We need to benefit from all this area has to offer.

I feel that will would see greater benefits if the Paria Plateau were managed for Multiple Use. ACEC and SRMA designations are inappropriate as they would essentially put a buffer against the existing wilderness resulting in defacto wilderness.

My concern with the plan as it is presently written, is that it discourages local development. The major focus appears to be on preserving or creating "remoteness". The Arizona Strip is a remote area regardless of the labels one may place on it. The main fear about setting aside areas for special "management", if it can be called that, is that by so doing, accepted land uses will become limited by political factors.

Thank-you,

Lyall McDonald
P.O. Box 115
Kanab, Ut. 84741

V-355

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

As a user of the Arizona District, I feel it is important to voice my concerns about possible changes that could occur in this region.

Our main emphasis during this decision making time should be to let this land remain available for multiple use as much as possible. Areas should be designated for multiple use. Such areas should include: Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits.

The Arizona Strip is a source of recreation for some, and the source of their livelihood to others. These resources should not be overlooked in order to give others more recreational useage of the area. There is already wilderness area available on the strip, and we don't need to add to it just to keep the naturalists happy.

After revlewing the draft for the Resource Management Plan, I have decided that alternative 4 would be most beneficial to all concerned. We need to keep this land available for all to use.

Thank you,

Sue Lewis
204N. 100E #2
Kanab, Ut

Union Pacific
Resources - Minerals

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

RE: Draft RMP & EIS for Arizona Strip District

Dear Mr. Curtis:

Union Pacific Minerals (UPM) appreciates the opportunity to have reviewed this document and discuss it with you and BLM staff. As you know, UPM is actively exploring for uranium breccia pipe deposits within the Arizona Strip District and is keenly interested in the BLM's plans as they may affect development of this important mineral resource found throughout the Arizona Strip. We have enjoyed a strong cooperative working relationship with BLM staff during the past seven years of our Arizona Strip exploration efforts and look forward to a continuation of that relationship as the RMP is finalized and implemented over coming years.

We believe that the cooperative industry-government approach already established within the Strip demonstrates that responsible mineral development can occur without compromising sensitive environmental resources. In that regard, UPM supports the BLM's intention to implement a management plan which will formalize the current policy of focusing agency concern on "unique" resource values (i.e. proposed "Area B" areas). We are also generally supportive of the BLM preferred alternative so long as it remains explicitly clear that multiple use activities will be allowed to continue within "B areas", subject to appropriate and reasonable stipulations.

UPM does have specific concerns about some elements of the proposed RMP and/or EIS as described in the attached comments. Please don't hesitate to call me or Jay McMurray, Manager of Uranium Exploration, at (303) 650-7200 if there are any questions. Again, we look forward to continuation of a cooperative relationship as the RMP process unfolds.

Sincerely,

Michael R. Neumann

Michael R. Neumann
Senior Environmental Coordinator

MRN/da
cc: J. M. McMurray
Attachments

Union Pacific Resources - Minerals
8774 Yates Drive, Suite 100
Westminster, CO 80030
303/650-7200

UNION PACIFIC MINERALS

COMMENTS ON

ARIZONA STRIP RMP/EIS

A. Issue: Management Guidelines (p.II-2)

1. UPM supports the concept of different management intensity levels as an alternative to overly restrictive designations (e.g. ACEC's, RCA's, closures, etc.) which can prohibit or severely constrain responsible mineral development, as well as other multiple uses. From the BLM figures given on page I-2, some 1,620,000 acres within the Arizona Strip (or approximately 30% of the total area) are already closed to mineral entry through designation as National Recreation Areas or Wilderness Areas. Another 450,000 acres are proposed for special designation in the preferred alternative, further restricting mineral activities within the Arizona Strip. Although we question the physical necessity of such designations to further protect resource values, we are sensitive to the various pressures upon the BLM to do so. We are also mindful of the protracted negotiations involved in the Arizona Wilderness Act of 1984 when all "special interest" parties agreed upon specific areas which would be closed to or released for mineral entry.

2. We suggest that BLM characterize lands proposed for "Area B" management as possibly having special resource values rather than unique values (pg II-2). The lands included within the 1.6 million acres mentioned above must exhibit some "unique" resource values which is presumably a major reason why they were previously withdrawn through Congressional actions such as the Arizona Wilderness Act of 1984.

3. The intention to permit removal of mineral materials in B Areas only "when

such disposal would enhance other resource values" is unreasonable and subject to misapplication. Under the provisions of 43 CFR Subpart 3809, mineral removal is permitted unless it will cause "unnecessary or undue degradation" or not "provide protection of nonmineral resources". Therefore, proposed mineral materials removal plans should only have to show that unnecessary and undue degradation will be avoided in "B areas" to be allowable. 1

4. Page II-3 refers to "special stipulations" that would be developed during the NEPA process. It is unclear if this statement refers to the current process and stipulations described in Appendix 5 or if additional stipulations may be developed. If additional stipulations are contemplated, when would they be disclosed? 2

B. Issue: Preferred Alternative

1. In general, UPM supports the preferred alternative (#2), even though mineral activities would be subject to further restriction on nearly a half million acres through various special designations.

2. The paragraph on Minerals Issue on page II-5 states that operating plans would be required for any Mining Law activities other than casual use within B Areas. Page II-13 of Table II-1 states only that "special stipulations would be added to exploration and development plans" in B areas. Other references in different sections of the RMP suggest that operating plans would only be required in ACEC's or areas designated closed to OHV use (pg. IV-33). Previous discussions with BLM staff indicated that exploration activities could occur with In B areas under a Notice of Intent except in ACEC's. 43CFR Subpart 3809.1-4 (5) would certainly seem to require an Operating Plan for any ORV use in closed areas. What is the legal 3

05-275 (continued)

1. The text has been changed to reflect this comment. Section 302(b) of FLPMA requires the Secretary to manage the public lands in a manner which prevents the undue or unnecessary degradation of the public lands. All mineral material disposal authorizations will be managed in compliance with these guidelines.

2. Site-specific stipulations would be developed in an EA prior to approval of a Plan of Operations or other application for development.

3. The text on page II-5 has been changed to clarify the requirements which would be imposed under Alternative 2. The text on II-10 has been changed to clarify the requirements which would be imposed under Alternative 2. Plans of operation are required for operations within ACECs and OHV closed areas. The acronyms OHV and ORV have been used interchangeably in this document.

distinction between OHV and ORV use? The RMP should be revised to include a table which succinctly summarizes when an Operating Plan will be required, when a Notice is sufficient, and under what circumstances (i.e. ACEC's, SRMA's, RCA's, OHV, VRM's, ERMA's, RMA's, SMA's, etc.) either may be required. 3 (cont.)

3. UPM believes BLM is minimizing the extent of adverse impacts on mineral exploration which requiring an Operating Plan would have (p. IV-33 conclusion). The fact that an Environmental Assessment (EA) prepared pursuant to a Plan of Operations is available for public comment which might trigger an additional 60 day review period will certainly discourage (if not prohibit) exploration in any areas which require an Operating Plan. The possiblity that an EIS could be required is an even greater deterrent because of the significant costs and time involved in the EIS process. While we recognize that historically the Arizona Strip District Office has elected to approve breccia pipe mining operations without requiring an EIS, it is possible that this policy may change in the future. One has only to look at the interminable EIS process for the proposed Canyon Mine on U.S. Forest Service land to appreciate the prohibitive effect on mineral development plans.

C. Issue: Off Highway Vehicle Use

1. As mentioned previously, it should be clarified whether an Operating Plan will be required for OHV use in special management areas other than ACEC's. 3 (cont.)

2. UPM is concerned that OHV use in areas proposed for "limited to existing or designated roads and trails" (LER&T and LDR&T) may be unduly restricted and make casual use mineral activities extremely cumbersome, 4

05-275 (continued)

4. Appendix 19 has been modified to reflect this comment. As specified in 43 CFR 3809.1-2, no notification or approval is required by the operator for casual use operations. Motorized vehicle use in areas not closed to such use falls under the definition of casual use in these regulations. Casual use operations are, however, subject to monitoring by the authorized officer to assure no undue or unnecessary degradation occurs.

05-275 (continued)

time consuming and costly. Appendix 22 (Off-Highway Vehicle Designations, p. A-70) suggests that off road vehicle use in a LERT would not be permitted for such casual uses as claim staking, prospecting or mining. 43 CFR Subpart 3809.0-6 clearly provides the right "to go upon the open Federal lands" for such purposes so long as unnecessary or undue degradation is prevented. Appendix 22 also implies that a Notice of Intent should be filed prior to ORV casual use mineral activities (e.g. claim staking) in LDR&T areas. We find this proposal particularly alarming in that it could compromise discovery opportunities by removing the element of confidentiality. It also seems that requiring approval by the authorized officer prior to ORV use in LDR&T areas is excessive and again contrary to the provisions of 43 CFR Subpart 3809.06 and 3809.1-2. Casual use activities, by definition, result in "only negligible disturbance" and in fact, usually do not cause any detectable disturbance. BLM and the public have already identified those lands where even negligible disturbances must be closely regulated via special management designations like ACEC's. Accordingly, we can not understand the need for further restricting OHV use associated with legitimate mineral activities in LDR&T areas. 4 (cont.)

4. In order to fully evaluate the potential impacts which OHV designations might have upon mineral activities (as well as other multiple uses), UPM requests that activity plans and maps for each proposed LDR&T area be made available prior to publication of the Final RMP/EIS. 5

D. Other Issues/Concerns

- Some portions of the RMP state that all ACEC's would be withdrawn from mineral entry while other segments state that operating plans would be required prior to mineral activities. Please clarify. 6

5. As stated on page A-66, the Bureau will prepare an activity plan and map identifying which roads are open in each area. Approval of the activity plan is subject to completion of an EA. These plans and maps will be circulated for public review as they are prepared. The RMP/EIS will only identify which areas will be classified as limited to designated roads and trails.

6. The preferred alternative proposes ACEC designations which require mining exploration and development entities to file a Plan of Operations with BLM for activities beyond casual use. Approval of the Plan of Operations is subject to completion of an EA. Approval of the Plan of Operations by BLM assures that activities are conducted in a manner that prevents unnecessary or undue degradation, provides protection to non-mineral resources, and provides for reclamation of disturbed areas. Based on our experience during the last decade, existing policy and procedures are adequate to allow mineral activities while protecting other important resource values.

   Alternative 3 proposed closing ACECs to mineral location. This would require a withdrawal in addition to the ACEC designation.

   The proposed RMP is adopting the preferred alternative for ACEC designations which would require filing of a Plan of Operations.

05-275 (continued)

- Table II-2 (Management Prescriptions for Special Management Areas) states that Class II cultural resource inventories will be conducted in RCA's, ACEC's, and SRMA's. Is there a schedule, priority list or plan for conducting the surveys? Will operating plans be approved within such areas prior to completion of the BLM Inventory, if necessary? 7

- BLM notes that "on the Arizona Strip, complete rehabilitation of a disturbance takes from five to ten years" (p.III-6). UPM's experience suggests that complete rehabilitation can occur sooner with diligent efforts and cooperative weather. 8

- For the record, it should be noted that proposed mineral activities have contributed directly to increased knowledge (and protection) of cultural resource occurrences throughout the Arizona Strip. Significant costs have been incurred by companies like UPM in making cultural resource information available to BLM. 9

- Does BLM have a schedule for establishment/revision of visual resource management classes in conjunction with this RMP process? If so, it should be included in the final RMP/EIS. 10

- UPM is not aware of any "perched aquifers (that) could be dewatered as a result of mining activities" (p. IV-26) anywhere in the Arizona Strip. The only aquifer known to occur with any regularity or in a regional context is the Redwall-Muav which underlies the breccia pipe deposits. Locally, stratigraphic "traps" may occur which are favorable to limited groundwater collection and penetration of such a water bearing zone during mine development might create a dewatering effect but only in the immediate area around the penetration. 11

05-275 (continued)

7. At present, Class II cultural resource inventories are not scheduled. An RMP implementation plan will be developed which would set priorities for conducting the surveys which will be subject to availability of funding. BLM will continue present procedures for approval of Plans of Operations which will not be subject to completion of Class II surveys.

8. Our experience indicates that the establishment of vegetation and associated restoration of visual aspects of a disturbed site, takes five to ten years or more in some cases.

9. We recognizes the contribution that all users of the public lands have made to increasing inventory and excavation on the Arizona Strip. This inventory or excavation data is required for State Historic Preservation Officer (SHPO) consultation or compliance with BLM-SHPO Programmatic Memorandum of Agreement. This is part of the applicant's legal responsibility before BLM can authorize any exchange, lease, permit or surface disturbing activity.

10. BLM updates the Visual Resource Management (VRM) classes as changes occur. Because the classes deal with the scenery as a whole, they seldom need updating. Events which may cause a need to change the boundaries for VRM classes are:

    1. New special designations to protect scenic values, i.e., ACECs, wilderness, and natural areas.

    2. A new major route such as a highway or freeway. The distance zones would change and require a new inventory along the route.

    3. A change in the public's sensitivity in allowing development or vegetative manipulations to occur in a particular area. BLM management may decide that an area warrants raising the classification on a higher more restrictive class to respect that sensitivity.

11. The term perched aquifer as used in the draft RMP/EIS is analogous to the term stratigraphic traps referenced in the comment. These perched aquifers or stratigraphic traps do occur in the Arizona Strip and do yield water for mining operations. If the use of water were great enough, in terms of either rate or duration of use, and the aquifer were limited enough, it is possible that a particular aquifer encountered during mining operations could be dewatered.

Appendix 5 (Reclamation Stipulations, p.A-13) basically summarizes existing standard operating procedures which UPM has been following for years, with a few exceptions. We would hope that reasonable seed mixtures (i.e. available and affordable) would be developed for the native species requirement in ACEC's, SRMA's and RCA's. Irrigation may be physically and economically impossible at some sites without creating disturbances and/or undesirable impacts. The requirement to mitigate potential adverse impacts of road dust in B areas could be extremely costly and would appear discriminatory toward mineral activities.

12

05-275 (continued)

12. The reclamation stipulations in Appendix 5 are intended for all surface-disturbing activities. When practicable, all activities would be required to meet these stipulations. Mining is just one of the many activities that disturb public lands.

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis:

To adopt alternatives 2 or 3 from the Resource Management Plan draft for the Arizona Strip shows a great lack of concern for the people in this area who depend on this region for their livelihood. To allow the Parashant area to be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3 could cause great hardship for many. Regulations made not allowing for new permanent grazing permits, new permanent roads, or improved access are not consistent with multiple use management.

We need to emphasize the use of these resources, especially those that naturally replace themselves. The cattle need to have this ground available for grazing. To take these permits from the ranchers could cost them their livelihood. There is no excess of land for grazing. The timber needs to remain available to future needs and demands. Our area depends heavily on the mining of Uranium. Many in our area would have to relocate if these resources were taken away from us.

Your support of Alternative 4 would continue to keep this region open to us in Northern Arizona and Southern Utah who count on it for our livelihood.

Thank-you,

Diana Barman
295 East 300 N.
Kanab, Utah
84741

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Vic Bradford
493 W 100 N (78-15)
Blanding, Ut. 84511

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

The fact that we are facing possible changes on the Arizona Strip causes one to be concerned about what affect it will have on them. I have reviewed the Resource Management Plan draft for the Arizona Strip, and of the alternatives available to us, I felt that #4 was in the best interest of us in these close lying communities. This is a land of multiple use. It should be managed as such. Alterations should be made to reflect this.

One alteration that should be made is removing the Paria Plateaus and Canyons from the designation of ACEC. The Paria already contains enough wilderness area. Proposed prescriptions such as closing the Plateau and canyons to minerl location and woodland product sales or designating the Paria River a wild and scenic river are not necessary. Protection of the area's various values can be accomplished just as effectively by less restrictive management prescriptions.

It seems that some people feel that in order to save the land, we have to lock it up and make it inassessible to the majority of the people. We do not have to put this land into cold storage. What we do need to do is allow the people multiple use of the land, with greater stress on managing it properly.

We have seen that these resources can be utilized without ruining the land. Regulations need to be made and carried out. Let's not just give up and keep the majority of the people out.

Sincerely,

Charlotte Barnum
Kane County Commission
295 East 300 N #54
Kanab, Ut. 84741

V-363

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

As a resident of Southern Utah, I become more and more frustrated at the Government who seems to be more concerned about the lobbyists in Washington than they do about the hard working citizen quietly going about making a living and paying their taxes.

The residents of Kane County have become a pawn in the Utah wilderness fight. Eighty-four percent of our county is federally owned. The BLM wants to designate 640,000 acres of the county as wilderness. Congressman Owens wants 800,000 acres, and Congressman Hansen has endorsed the designation of a "mere" 120,000 acres. Now the BLM wants to further restrict hundreds of thousands of additional acres in the Arizona Strip. It appears that the public lands in the Arizona Strip belong to everyone except the public who live in or near the district.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proosed in Alternative 3. The proposed management prescriptions such as no new permanent roads or grazing permits are not consistent with multiple use management. The Parashant should be placed in Area A.

Where does it all end? I have reviewed the RMP draft of the Arizona Strip and I am strongly in favor of alternative 4 with modifications stressing multiple use management. We cannot afford to lose 452,800 addition acres to wilderness. Adopt alternative 4, and place Parashant in Area A.

Thank you,

John W. Schmutz DDS
547 N. 200 E #46
Kanab, Utah 84741

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After reviewing a copy of the Resource Management Plan for the Arizona Strip, I found little evidence showing that the regulations you desire to adopt must be impossed on an area-wide basis to protect any resource. We could more properly address the needs of this area on a more specific selective site basis.

Uinkaret (Logan and Trumbull), Parshant and Black Rock Mountains, woodland areas, and areas now under livestock permits should be reviewed and considered for placement into Category A. These areas should be managed for multiple use.

Developmental proposals seemed to be lacking from the draft. We need to take the steps necessary to see that this area remains open for future exploration. Our needs in the future will change, and these resources need to remain available to help meet those needs. It is obvious that the financial well being of many residents in the surrounding communities depend on this.

By adapting alternative 4 from the RMP, I feel that these resources will continue to be available. Consider the needs of us who would be so seriously affected by approving either alternative 2 or 3.

Thank-you,

Lenni R. Chenard

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I attempted to read the Resource Management Plan for the Arizona Strip. I wasn't very successfull in my attempt to understand all aspects of this draft. The draft does not provide a clear statement about the nature of BLM's proposed management prescriptions. For example, it repeatedly refers to "management guidelines" for "area B". The "guidelines" themselves are never clearly defined. It is not possible to provide meaningful comment on such guidelines if they are not identified.

The fact that alternatives 2 and 3 call for tieing up 452,800 additional acres into wilderness is very distrubing to me. I don't feel that this is necessary in order to preserve the beauty of this area.

I support alternative 4. However, we must be certain that these changes will not affect the resources that we now use. The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. Modifications need to be made to this alternative stressing multiple use management.

Sincerely,

Lucille M Chenard

May 20, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am not in favor of adding 452,800 acres to the already excessive wilderness designated areas. I have seen that doing this is not always beneficial to the land. You can see a great difference between the Kiabab National Forest, and the Park Service ground around the North Rim of the Grand Canyon. There is so much undergrowth that it is nearly impossible to walk out through the trees.

We need to harvest the timber resources that are available to us. We have the facilities to do so, and we need to keep the people in this area employed. In order to do this we must be allowed to keep the under growth down. I recommend a sheltered wood harvest. These timber areas should be classifed into catagory A with intensive resource useage.

I support Alternative 4 of the RMP draft with alterations to allow all woodland areas to be placed into Area A. - Category A.

Thank you,

ROBERT ANDERSON
295 E. 300 N #54
KANAB, UTAH
84741

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

As the deadline is drawing near for public comment about the Resource Management Plan draft for the Arizona Strip, I felt I needed to take a couple of minutes and express my opinion about the management of this district.

We have seen great growth in our area due to the development of the resources in this district. Sometimes I wonder how this development ever took place with the effects that the environmentalists are having on the use of our public lands. They have gone too far, and the needs of the majority are being neglected in order to satisfy the demands of these few.

We have seen communities dry up, not because the resources weren't available to meet their economic needs, but excessive restrictions have made it impossible to move forth in development of these resources. Don't let this happen to the residents of Kanab and Fredonia. Adjustments have been made in our school systems to meet the growing populations. We need the tax base that this area has provided in order to meet the demands of this increased population. Closing off the district to our use would have a detrimental affect on the residents of this area.

The Unikaret (Logan and Trumbull), Parashant and Black Rock Mountains should all be managed for multiple use and be placed in Area A - Category A (Forest lands available for intensive multiple use). We can't afford to lose the valuable resources in these areas.

I support alternative 4 with my suggested changes. Keep our public lands open to future resource development.

Sincerely,

Peggy L. Schmutz
547 N. 200 E #46
Kanab, Utah 84741

May 14, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

I realize the importance that proper management of our public lands plays to their productiveness. I have examined the Resource Management Plan draft of the Arizona Strip. While some restriction is good, over restriction is unproductive. The restrictions that are placed on this public land need to be reasonable and workable.

Alternatives 2 and 3 would overrestrict the use of the resources on the Arizona Strip. Recreational use, grazing, mining, and timber harvest would essentially come to a halt by the end of the Plan's time frame. We need to continue to develop these natural resources. Many of them are renewable resources that could provide sustained productivity with little harm to the environment.

Consider alternative 4 with modifications allowing for multiple use of the Arizona Strip district. Specifically, Uinkaret, Parashant and Black Rock Mountains should be placed in area A - category A. RCA's, SRMA's, and ACEC's shouldn't be employed.

Sincerely,

Dallas Bamhurst
3416 E. 5350 N.
Kanab, Ut 84741

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

After reviewing the Resource Management Plan draft of the Arizona Strip, I feel that your desires to allow 452,800 additional acres of our public lands to be tied up into defacto wilderness (special management areas) is unreasonable.

There will always being wilderness available to us. Factors of mother nature take care of this. I don't feel that this area has been over developed. The unique beauty still exists in the district. To set aside wilderness for wilderness sake is not necessary.

I depend on the resources of the district for my livelihood. The resources are here for us to use. We need to do so with caution. I support alternative 4 with elimination of the Paria as an ACEC. Protection of the Paria's various values (cultural, recreational, etc.) could be accomplished just as effectively by less restrictive management prescriptions. Multiple use of our public lands is in the best interest of all concerned.

Thank you,

Donni Bamhurst
3416 E. 5350 N
Kanab, Ut 84741

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

W L Ham---

V-367

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Bradley Reb---

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

When it comes to the use of our public lands, it essential that some of them remain open to multiple use. Our public lands can meet the needs of many, and indeed it is the responsiblity of BLM management to see that this is the case.

I don't feel that the additional regulations that are called for in the Resource Management Plan draft for the Arizona Strip are necessary. The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. Indeed, elimination of categories of uses on an area-wide basis without regard for the compatibility of a specific proposed use and the protected resource, does not fulfill BLM's obligation to manage for multiple use.

Alternative 4 would be the best method for management of this area. It is essential that measures be taken to assure that the Arizona Strip will be open to the use of many. We can do this by making alterations to the draft representing this need.

Thank you,

Beth W. Martin

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of all resources.

Thank you for the opportunity to express my views.

Sincerely,

David W Whitlock

May 8, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have read through the Resource Management Plan draft for the Arizona Strip. I am disturbed by the fact that you show a desire to lock up an additional 452,800 acres. These lands that are being examined are economically producing for the needs of many in our area.

Less than three percent of the Arizona Strip's 5,371,000 acres is in private hands and contributing to the local tax base. Because of the limited private lands, this region depends heavily on mining, ranching, and other multiple uses of public lands to contribute to the economic well being of our area. As the government continues to tie up more and more of our land and place them into wilderness, it is becoming more and more difficult to find a means to provide for our families.

As I studied the Alternatives list in this draft, I felt that alternative 4 would best meet the needs of the people in this area. We need to take into account the needs of our people. We live here, and we have to provide for ourselves. The few who enjoy the use of this wilderness area aren't going to help us out in any way.

Thank you,

Damon Roundy

V-369

May 16, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After reviwing the Resource Management Plan draft for the Arizona Strip, I realize the far reaching effects that the adoption of the wrong Alternative could have on the economical base of our area. I feel that the only right alternative is 4.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, nor as a SRMA as is proposed in Alternative 3. Limitations restricting no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

We need to shift away from single use management, and emphasize multiple use management. To limit this land to a single use would be a great mismanagement of our resources. This type of limitation could be deterimental to us. We rely on the timber, mineral, and recreational resources. To loose all this to "more" wilderness area would be foolish.

Sincerely, Lance & Williams



APPLIED FORESTRY: Timber Pricing - Contracts - Inventories - Management - Studies - Planning

May 20, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District Office
390 North 3050 East
St. George, Utah 84770

Dear Dennis:

I am happy to comment on your Resource Management Plan for the Arizona Strip.

The main items that concern me are the replaceable resources in the management area. In general, they are restricted from full Multiple Use Management. I am referring the categoriaztion of the timber resource which makes management of the timber a secondary objective. The remaining timber resource, open to Multiple Use, (15,200 acres) will continue to suffer significant biological damage - stagnation, weakened vigor, higher susceptibility to insect and disease, loss of age classes and continued fuel build-up for nature's conflagration. The silvical needs of the timber resource are being made subservient to the "Remotness" planning factor.

Placing restrictions around designated wilderness areas which limit or prohibit Multiple Use Management seem to be circumventing the intent of congress, who has already designated the limits of the Wilderness areas.

I strongly recommend Alternative 4 with the elimination of category restrictions, so full Multiple Use Management can be practiced.

Sincerely,

Dave Fordyce

ave Fordyce
Forestry Consultant

Dave Fordyce
Consultant in Forestry
1740 Lake Street
Ogden, Utah 84401
Phone 801-621-1194

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of all resources.

Thank you for the opportunity to express my views.

Sincerely,

Harry Leisinger
25151 C.R.G.
Cortez, Co. 81321

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I find it necessary to take the time to write concerning my opinions on the changes that may occur in the Arizona Strip Region.

We depend on the resources on the Arizona Strip. There is limited private ground available to us in this area. This being the case, our private grounds become even more valuable to us. Your plan stated that 135 ranchers have permits to graze their cattle on the strip. These grazing permits can't just be replaced because somebody wants to lock the cattle out of the Strip.

The people in Northern Arizona and Southern Utah depend on this area for much of their financial security. We can't afford to lose the mineral and timber rights. Our area is already hard pressed for employment opportunies and growth.

I feel very strongly that tieing up 452,000 additional acres into wilderness would hurt the outlying communities greatly. The Parashant area should not be designateed a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. We could continue to receive the benefits from this area if Alternative 4 were adopted. This land must be used by many. Please to don't take it away just to meet the needs of a few.

Sincerely,

Mel Kingsford
KANAB, UTAH 84741

V-371

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

The people in this area could be greatly affected by any changes that could occur due to your study of the Arizona Strip. Because of this, I obtained a copy of the Resource Management Plan draft. After examining it, I realized that there were serious reasons to be concerned. Our community depends heavily on the Strip's resources. The economic affects could be very serious.

The additional regulations proposed in the RMP will adversely affect local communities. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values could be accomplished just as effectively by less retrictive management prescriptions.

Our livelihood could be seriously affected by these changes. Alternative 4 of the RMP seems like the logical answer. We need to see to it that these resources remain available to use. The lose of timber, mining, & grazing rights could not be replaced.

Sincerely,

Debbie Porter
420 E. 100 S. #68
Kanab, Utah
84741

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip Ditrict
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

After reviewing the Resource Management Plan, I am concerned that any of our forest/woodland Resources placed into a special management category could be lost to us.

These resources need to be protected by us. We need to ensure that the forests are well-managed and a healthy productive ecosystem maintained. We need to achieve and maintain optimum growth of the Pinion Pine, thereby maintaining the health and vigor of the stands.

My biggest concern is that we cannnot protect them from a catastrophic fire or infestations. Our resources need to be maintained and cared for. If we don't use them we could loose them.

Alternative 2 designates 15,200 acres of Ponderosa forest (all of our commercial forest on the Arizona Strip District) in Management Category C - "forest management for the enhancement of other uses." These forests should be managed for their own inherent value, and not to enhance other values.

I support Alternative 4 with the modification that all 15,200 acres of forest be placed in Management Category A and be managed for intensive multiple use.

Thank you,

Douglas Carroll

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The closing of 452,800 acres to public use and placing it into wilderness would not be an effective measure on the Arizona Strip. Under alternative 4 of the RMP draft, closure of roads on the 690,400 acres may only promote OHV's to develop detours and mark up the land. I don't feel that you can tie up our public land for this single type of recreation.

These lands need to remain open to multiple use. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are not necessary. Protection of the area's various values can be accomplished just as effectively by less restrictive management prescriptions. We are not going to benefit from placing such heavy restrictions on this area.

Thank you,

W. S. Klemme

May 20, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis,

In reguards to the Resource Management Plan draft for the Arizona Strip I favor Alternative 4.

I feel Alternative 4 administrates public land for multiple use the best for all concerned.

Sincerely,

LaVar Fonnesbeck

V-373

May 12, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis:

After examining the Resource Management Plan draft for the Arizona Strip, I have concluded that alternative 4 would be the most logical alternative to be put into action.

The Arizona Strip District is, and will remain, remote. Several factors determine whether an area will be developed or remain remote. The terrain, its location, availability of water, its accessability, and whether it is inhabited are just a few of these factors. We don't need to interfer in this process.

By designating such a huge amount of acreage into wilderness the land becomes virtually inaccessible to all. There is already enough remote, uninhibited places for backpackers. Lets take into account the other 99% who have to make a living in this area. Taking away the precious resources would only cause great hardships to the many in this area who depend on them for their income. Alternative 4 would continue to provide these opportunities while providing the remote areas for those who desire to use the land in this way.

Sincerely,

Tami Johnson
Box 263
Fredonia, AZ 86022

May 9, 1990

Dennis Curtis Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing to comment on the draft Resource Management Plan for the Arizona Strip.

As an employee of a contracting company which is involved in uranium mining on the Arizona Strip, I depend on our public lands and their resources for my livelihood. I am very concerned that the land be managed for multiple use and not further restricted for the sake of values such as "remoteness" which, in my opinion, are not in jeopardy. The very nature of the Arizona Strip (the few roads, small amount of water, rugged terrain, etc.) will protect the remote character of the land for the foreseeable future without additional regulatory restrictions.

In fact, the only thing in jeopardy on the Arizona Strip is the ability of us local residents to find and keep secure, decent paying jobs in the face of ever-increasing governmental regulatory controls. With the huge amount of federal lands in the region (much of which is already withdrawn from commercial activities), we have been forced to rely on lower paying, often seasonal jobs in the government or tourist-related sectors. The mining and timber industries provide many of us a decent living as well as an essential source of tax revenues for our communities.

As much as I would prefer no additional restrictions on the lands of the Arizona Strip, I realize that political realities dictate that some land management revisions be made. With that in mind, I recommend that the BLM support Alternative 4 with modifications that will ensure intensive multiple use of <u>all</u> resources.

Thank you for the opportunity to express my views.

Sincerely,

Wade R Jessop

Colorado City AZ.
Box 36
455 Jessop Av.

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I don't understand the need for such emphasis on remotness in the Resource Management Plan draft. When the area surrounding the Arizona strip is evaluated, one must surely realize that primitive back country settings are presently heavily consentrated both within the Strip and all around it.

The Strip does not need to exclude more area from other uses to allow for more wilderness. The BLM must manage the remaining resources very actively and wisely. These areas need to provide multiple use. With the limited private land available for development in our area, it is extremely important that we don't allow our public lands to be tied up into this type of one use plan.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. Regulations disallowing new permanent grazing permits, new permanent roads, or improved access are not consistent with multiple use management. I support multiple use. Adopt alternative 4 and make modifications to allow for such use.

Sincerely,

Brian Palmer

P.O. Box 1117
Kanab, Utah
84741

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I believe that we need to plan for the future if we want to continue to exist in this area. We must develop our natural resources to provide for future growth in our area.

Alternatives 2 and 3 would stop any future development on the Arizona Strip. It would close any possiblity of agricultural entry into this area, and no future leases would be granted for the use of these public lands. Not only will this affect those involved with Energy Fuels through the mining of these resources, but if will affect future timber harvest expantion and those with grazing permits. We need to balance use and conservation of renewable resources to provide sustained productivity.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area.

Alternative 4 ammended as indicated above would let this area legally remain open to future development. We can't lock off this area from the needs we may have in the future. Let's continue with multiple use management of this district.

Thank you,

Norlean Kelly
145 W 300 N
Kanab, Utah
84741

V-375

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I have examined a copy of the draft of the Resource Management Plan for the Arizona Strip. My concern lies with the Area B designations.

The RMP lists various areas qualifying for special management. In my opinion, these are the very areas which should be left open so that whatever is needed may be accomplished. If sensitive areas are excluded from certain uses, we may be shooting ourselves in the foot by limiting the management tools available to use.

I realize that we should be concerned about these areas, but I feel that you have been overzealious in your efforts to protect them. Each area should be examined and a decision made on a case by case basis. Please examine the Logan and Trumbull areas, Parashant and Black Rock Mountains, woodland areas, and all areas now under livestock permits. They should be managed for multiple use and placed in Area A - Category A.

Alternative 4 seems to be the best approach to take at this time on the strip. These lands should not be tied up. Lets allow for multiple use of our public lands.

Sincerely,

C. Hailu
254 S. MAIN #107
KANAB, UTAH 84741

May 10, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 350 E
St. George, UT 84770

Dear Mr. Curtis:

I have recently reviewed the Resource Management Plan draft for the Arizona Strip. Of the alternatives listed, #4 seems to be the most reasonable solution.

We are fortunate to have unique breccia pipe mineral deposits within the Strip which, during the past dacade, have yielded a major portion of the nation's uranium production. It has been proven that the Strip's uranium reserves can be developed without harming other important resources.

The mining of this mineral has caused a great growth in our area. If access were to be taken away from this resource, there would not be employment opportunites for these new people and they would have to relocate. Not only would this be a hardship, but it would be next to impossible to sell their homes in such an economically depressed area.

The BLM should promote the development of important natural resources on public lands. The multiple use of this public land has been a good thing. Why change that? This area has been enjoyed by many, and that isn't going to change unless we make it inaccesible to the people by locking it up into wilderness area.

Sincerely,

Glen Strand
P O Box 748
Hildale Ut. 84784

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I am writing concerning the draft of the Resource Management Plan for the Arizona Strip. I have reason to be seriously concerned after reviewing this draft. With the emphasis that is being placed on ACEC's and wilderness, I fear for my future employment on the Strip.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. RCA's, SMRA's, and other restrictions to Multiple Use should not be employed.

I realize that it is important that we evaluate this area and make corrections in previous management methods if necessary. I feel that alternatives 2 and 3 are far too restrictive. The draft RMP's new special management areas (ACEC's special recreation management areas, resource conservation areas and B areas) are simply another brick in the wall which eventually will reult in the total prohibition of any development on public lands.

Alternative 4 makes it possible for my continued employment on the Strip. It allows for use now and in the future by allowing us to continue to develop the resources in the District. However, modifications need to be made to the draft for emphasis of multiple use of these public lands.

Thank you,

Lottie C Steiner

May 11, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 East
St. George, UT 84770

Mr. Curtis:

I am greatly concerned overy your desire to remove much of the land from the Arizona Strip and place it into wilderness. This region needs to provide for the needs of many. To sacrifice these valuable resources in the name of "remoteness recreation" is vary short sighted.

The Resource Management Plan everemphasizes the need for "remoteness" which it defines as "recreation experience opportunities in backcountry, natural-appearing settings". BLM feels apparently, that it must impose further restrictions on multiple use to preserve the remote character of the Strip. It proposes to create several new special management areas to do so. Looking at the Strip in a regional context, however, additional restrictions are unnecessary and inappropriate.

We cannot continue in this fashion and contiune to give into these "rich" environmentalists. You need to listen to the needs of the majority. I feel that adopting alternative 4 is our only choice.

Thank you,

Robert Stad
Box 426
Colorado City AZ.
86021

V-377

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I don't feel that tieing up more of our land into wilderness is the answer to the problems we are experiencing. We need to learn to manage what is available to use. We have a responsiblity to the land. It should not be taken lightly.. The government seems to be making these decisions for us by designating more and more land as wilderness. If the land is managed wisely it can meet the needs of many.

Currently over 9% of the strip is designated as wilderness. Management is needed of the forested land remaining. We should manage the forests to show what a well managed forest provides. I recommend a sheltered wood harvest. I recommend putting this resource into catagory A with intensive resource useage. I also recommend putting the Logan and Trumbull areas, Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits into catagory A.

From the Resource Management Plan, I have concluded that the desire is to take more of this area and lock it away. I support Alternative 4. Lets keep this area available to the people.

Thank-you,

Rebecca Stad

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I want to stand up and be counted. I am in favor of alternative 4 of the Resource Management Plan for the Arizona Strip District. It is in the best interest of residents in Kanab and Fredonia.

Many depend on the continued use and development of these resouces for their livelihood. Tieing up 452,800 additional acres would place restrictions on mineral development, timber harvesting, and grazing rights. The effects would be detremental to us if alternatives 2 or 3 were adopted. I support alternative 4 with modifications stressing multiple use of our lands. We all need to use our public lands. Don't limit their use to just a few.

For example, the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreational, ect.) could be accomplished just as effectively by less restrictive management prescriptions.

Thank you,

Lynette Jones

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

I have reviewed the draft of the Resource Management Plan for the Arizona Strip and I am in support of Alternative 4; however, I feel some changes could be made to better allow us the full useage of this area.

I support Alternative 4 with modifications to include intensive multiple use management. We need to be allowed to develop the natural resources, recreation opportunities, timber resources, and grazing resources.

Thank you,

Rosalie Hatch

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I realize that it is in our best interest that the BLM reviews the Arizona Strip periodically. My biggest concern at this time is that our area may be economically affected by any of the possible changes that could take place.

Because I am financially dependent on the resources of the Arizona Strip, any changes could have a serious affect upon me. I've reviewed the Resource Management Plan and I don't agree with things as they are stated.

After comparing the four alternatives, one must think which is the best for the people of this area. Alternatives 3 and 4 recommend designating the Paria Plateaus and Canyons as an ACEC. The Paria already contains a wilderness area. Restrictions closing the Plateau and canyons to mineral location and woodland product sales are unnecessary. Protection of this area's various values could be accomplished just as effectively by less restrictive management prescriptions. I am in support of alternative 4 with changes reflecting multiple use.

Thank-you,

J. R. Jones

V-379

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Many significant changes could occur on the Arizona Strip if Alternatives 2 or 3 are adopted from the Resource Management Plan of the Arizona Strip. Changes would affect livestock operations and mineral exploration/development.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management methods such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

If alternative 4 were adopted many of these operations could continue as presently constituted. This is a very important step if we want to continue to reside in the area surrounding the Arizona Strip. We need to emphasis multiple use of our public lands. They need to be used by all.

Thank-you,

Duff Pugh
158 W. 100 S.
Kanab, Ut

05-308

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I want to stand up and be counted. I am in favor of alternative 4 of the Resource Management Plan for the Arizona Strip District. It is in the best interest of residents in Kanab and Fredonia.

Many depend on the continued use and development of these resouces for their livelihood. Tieing up 452,800 additional acres would place restrictions on mineral development, timber harvesting, and grazing rights. The effects would be detremental to us if alternatives 2 or 3 were adopted. I support alternative 4 with modifications stressing multiple use of our lands. We all need to use our public lands. Don't limit their use to just a few.

For example, the Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreational, ect.) could be accomplished just as effectively by less restrictive management prescriptions.

Thank you,

Lynette Jones

05-309

May 10, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, Ut 84770

Dear Mr. Curtis:

I have reviewed the draft of the Resource Management Plan for the Arizona Strip and I am in support of Alternative 4; however, I feel some changes could be made to better allow us the full useage of this area.

I support Alternative 4 with modifications to include intensive multiple use management. We need to be allowed to develop the natural resources, recreation opportunities, timber resources, and grazing resources.

Thank you,

Rosalie Hatch

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I realize that it is in our best interest that the BLM reviews the Arizona Strip periodically. My biggest concern at this time is that our area may be economically affected by any of the possible changes that could take place.

Because I am financially dependent on the resources of the Arizona Strip, any changes could have a serious affect upon me. I've reviewed the Resource Management Plan and I don't agree with things as they are stated.

After comparing the four alternatives, one must think which is the best for the people of this area. Alternatives 3 and 4 recommend designating the Paria Plateaus and Canyons as an ACEC. The Paria already contains a wilderness area. Restrictions closing the Plateau and canyons to mineral location and woodland product sales are unnecessary. Protection of this area's various values could be accomplished just as effectively by less restrictive management prescriptions. I am in support of alternative 4 with changes reflecting multiple use.

Thank-you,

J. R. Jones

V-379

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Many significant changes could occur on the Arizona Strip if Alternatives 2 or 3 are adopted from the Resource Management Plan of the Arizona Strip. Changes would affect livestock operations and mineral exploration/development.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management methods such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

If alternative 4 were adopted many of these operations could continue as presently constituted. This is a very important step if we want to continue to reside in the area surrounding the Arizona Strip. We need to emphasis multiple use of our public lands. They need to be used by all.

Thank-you,

Duff Pugh
158 W. 100 S.
Kanab, Ut

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

The Resource Management Plan places too many limitations on land use on the Arizona Strip. The BLM has the authority to direct the activities that occur on the lands administered by them. The RMP is counterproductive in its desires to limit the use of our resources on these public lands.

Adopting this plan as implemented does not allow us to care for this land and its resources. Much effort has been put forth to make this land fruitful. Adoption of alternatives 2 or 3 would only reverse all this hard work. Not only will it affect the land, but it will affect the economical well being of many in the Kanab and Fredonia area.

We need to keep this area open for public use. Adopt alternative 4 and allow multiple use of this area. One step that would add to these multiple use areas would be to manage the Paria Plateau for Multiple Use. ACEC and SRMA designations are inappropriate as they would essentially put a buffer against the existing wilderness resulting in defacto wilderness. Such areas have already been eliminated by study, and the actual wilderness, with no buffers, has been approved by congress.

Sincerely,

Kolain Truyells
P.O. Box 120
Escalante, Ut 84726

May 20, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

Creating 452,800 acres of special management areas under alternative 3 would not be an effective measure on the Arizona Strip. Under alternative 2 of the RMP draft, closure of roads on the 690,400 acres may only prompt OHV's to develop detours and mark up the land. I don't feel that you can tie up our public land for this single type of recreation.

These lands need to remain open to multiple use. We are not going to benefit from placing such heavy restrictions on this area. I support alternative 4.

Thank you,

Amy Redd

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Curtis

In your Resource Management Plan draft for the Arizona Strip you stated that the "preferred" alternative was #2. This causes me to worry, because the loss of the resources in this region could have a serious affect on my future.

Our community is relatively far from regional economic hubs. As a consequence, we must largely depend on local industry and on the continuation of multiple use of BLM administered public land to sustain our economic base. In the last several years, however, many local industries such as mining and ranching have been operating on the margin. The proposed management methods suggest no new permanent grazing permits, no new permanent roads, and no improved access. This is not consistent with multiple use management. These regulations would cause many of these operations to go under.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. Increased BLM regulation that further restricts the opportunities for commercial activities should occur only where specific circumstances clearly demand such regulation. I do not see a need to make any major changes at this time. Thus, I support Alternative 4 as the best choice to make. By so doing, these public lands would still be able provide this important economic base that we need so badly in this area at this time.

Sincerely,

Keith Robinson

140 N 200 W #8
Kanab UT. 84741

V-381

May 17, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

Although it was a difficult task comprehending what was actually stated in the Resource Management Plan of the Arizona Strip, I was able to somewhat understand it and I wasn't excited about what I read. I don't feel that the alternatives leave enough land available for multiple use. I suggest designating the Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits as mutliple use areas and place them in Category A.

According to the draft, economic development has not been truely addressed. The surrounding communities need development of its natural resources, it's forest products, and continued grazing permits. The communities basically support the concept of multiple use. I know of no one who wants to abuse the lands, the water, or the air. I feel that the people in this area also should have a right to support their families.

The present management team at the BLM has been responsive to the people in this area, and I hope this attitude can continue. I don't feel that multiple use management has received enough consideration in the RMP draft. As things stand, I am in support of alternative 4 with changes to reflect multiple useage of our public lands.

Sincerely,

Lisa C Robinson

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4 with modifications reflecting multiple use. Areas should be managed for this purpose. Such areas that would fit under this designation are Logan and Trumbull, Parashant and Black Rock Mountains, woodland areas, and all areas now under livestock permits. Please consider these changes when making the final desicisions for the Resource Management Plan.

Thank you,

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

I feel that the Resource Management Plan draft for the Arizona Strip has taken too aggressive steps for land maintenance of the District. This is especially noticable under alternatives 2 and 3.

Management prescriptions for areas of critical environmental concern with cultural values would have more restrictive management. These areas would be withdrawn from mineral location, closed to woodland harvest, vegetation manipulation would be prohibited, and OHV's would be limited to existing roads and trails.

More of these public lands need to be open to multiple use. I suggest designating Logan and Trumbull, Parashant and Black Mountains, woodland areas, and areas now under livestock permits as areas of multiple use management. The Paria Plateau should also be managed for Multiple Use. ACEC and SRMA designations are inappropriate as it would essentially put a buffer against the existing wilderness resulting in defacto wilderness.

We need to be consciencious of our environment, but I feel that these measures are too extreme. Alternative 4 meets the needs of the ACEC's without locking up these resources. Thus, I support alternative 4 with modifications stressing multiple use management.

Sincerely,

Wayne N. Robison

May 19, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We are faced with the responsiblity of making some vary important decisions concerning the Arizona Strip. I think that the #1 decision that should be made is that we keep these lands available for multiple use. This area can be used by many. We shouldn't shut off the flow of its important natural resources. Areas that should be managed for multiple use and placed in Category A are Logan and Trumbull, Parashant and Black Rock Mountains, woodland areas, and areas now under livetock permits.

Tying up so many additional acres into wilderness is not going to meet the needs of the people in our area. Not only do these lands provide for recreational use, but they also provide an economic base for many people. This area is hard pressed for good year around employment. Tourism is good for some, but it can't provide for all. To take the opportunity away from the people in Northern Arizona and Southern Utah to expand and grow would cause a great economical strain.

I support Alternative 4 of the Resource Management Plan for the Arizona Strip Region; however, it is necessary that modifications be made to it stressing multiple use.

Sincerely,

Jewell Robinson

V-383

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr. Curtis:

I have read the Resource Managament Plan draft for the Arizona Strip. I wasn't really excited about any of the Alternatives as they were stated. Of the alternatives available I support #4, but I feel that this alternative could be revised to better reflect the needs of the people in this region. It needs to be modified to reflect multiple use of these public lands. I would suggest designating the Uinkaret (Logan and Trumbull), Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits as multiple use areas.

We have many needs that need to be meet from our public lands. Because opportunities to use private lands are so limited, we depend heavily on our public lands to fill in the gaps. Beyond the use of this area for recreation are those who depend on it for their livelihood. This area does much to provide for the needs of many in Northern Arizona and Southern Utah.

I feel that we should revise this alternative to reflect the needs of many. Our alternative should be more in tune with multiple use.

Thank you,

Robert J. Helm

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Mr. Curtis

I do not feel that the Resource Management Plan draft for the Arizona Strip Area establishes the need for additional management restrictions. The impact of management restrictions on multiple use could be substantial. Little evidence shows that such restrictions must be imposed to protect any resource.

The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreational, etc.) could be accomplished just as effectively by less restricitive management prescriptions.

Many of these areas of concern are protected under federal management laws. Why inflict us with more restrictions, and regulations? We have seen that Recreational enjoyment can exist in unison with harvesting the mineral and timber resources. Alternative 4 is my choice to best leave these public lands as a multiple use area.

Thank you

Jay M. Nielsen
271 w 300N #35
Kanab ut. 84741

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

At a time when unemployment is so high, it is important that we do all we can to find or create opportunities for increased employment. By tieing up more of our public lands into wilderness, we are decreasing our chances for growth and an improved economic base.

We need to examine all of the alternatives closely before making the final decision. We need to take into account the needs we will have in the future as well as our present needs. The management methods suggesting no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. These resources need to remain open for exploration and development. The needs of the people in the surrounding communities should be of serious concern. We are the ones that will be affected.

Our future depends on these resources. Alternatives 2 and 3 are excessive in there demands. The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. Alternative 4 is my choice because we can continue to develop these resources and receive benefits now and in the future.

Sincerely,

Geo L Lunt
364 W. 200 N. #3
Kanab, Ut 84741

May 18, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Dennis:

I have reviewed the draft of the Resource Management Plan for the Arizona Strip. It seems that suddenly there is a big scare concerning preserving the natural beauty of this earth. This is a good thing because it has been abused in many ways with many adverse affects to us its inhabitants. However, there are limits to what we should do in the environmental area. We have wilderness areas, and to think that if we don't designate certain areas as such will lead to extinction is far from the truth. Many different elements lend to whether an area will be developed or remain remote.

I support Alternative 4 from the draft. To tie up 452,800 acres in additional wilderness is not going to benefit us in this area. The Paria Plateaus and Canyons should not be designated an ACEC as recommended in Alternatives 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values could be accomplished just as effectively by less restrictive management precriptions.

We need the tax base and the cash flow that this area provides to us through its natural resources. Please consider the needs of us who depend on this area for our livelihood.

Sincerely,

James Benkins
Kanab Utah

V-385

May 18, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I do not agree with the preferred alternative (2) in the Resource Management Plan for the Arizona Strip. The Parashant area should not be designated a RCA as you suggest in this alternative, or a SRMA as is proposed in alterative 3. The proposed management methods such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with mutiple use management. After a review of this draft, I support Alternative 4 with modifications stressing multiple use.

This region hosts many resources. It needs to be managed in such a way as to make these resources available for our use. We need these resources for our finacial well being.

A better approach would be management planning. Access and road planning are needed in place of remoteness management. An area doesn't need to be designated as wilderness in order to stay that way!

Thank you,

Reed Jepsen
Bx 356
Kanab, Utah
84741

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 N 3050 E
St. George, UT 84770

Dear Mr Curtis:

I have examined the Resource Management Plan draft. The people in this area need to stand up and be counted. If we don't take a stand now, it could be to late.

Mining has provided many needed jobs in our area. Where would our communities be today if these resources had not been explored and cultivated? This region provides much needed grazing for the ranchers of this area. The timber could be harvested in the future when demand is shown. There is great beauty to be seen and enjoyed by all, and I don't feel that the use of these resources has threatened that.

What good would tieing up more land into wilderness do? Some areas that should be managed for multiple use are Logan and Trumbull, Parashant and Black Rock Mountins, woodland areas, and areas now under livestock permits. Modifications need to be made in this plan to allow for multiple use management. I feel that less people could enjoy the resources this land has to offer. I support Alternative 4. It would add some additional acres for wilderness use, but would continue to allow us the use of these precious resources.

Sincerely,

Mary Cross
P.O. Box 403
Kanab. Ut.
84741

May 17, 1990

Mr. Dennis Curtis
Bureau Of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

It seems that more and more people are trying to take lands away from the majority who need them and give them to the minority who wants them. I think that we need to distinguish between desires and needs. We all have to do that with our own finances. It is time to do this when it comes to determining the management methods of our public lands.

The Parashant area should not be designated a RCA as you suggest in Alternative 2, or a SRMA as is proposed in Alternative 3. The proposed management prescriptions such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management. Alternatives 2 & 3 go overboard in setting aside excessive wilderness area. I support alternative 4. By adopting this plan, we could still have some land available for multiple use. We need to use these resources, they are critical to our survival in this area.

Thank you

Genevieve Swapp

May 17, 1990

Mr. Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr. Dennis:

Development on the Strip is limited by various natural characteristics of the area. The rugged terrain, deep canyons, and lack of water have made it impossible to develop certain areas. There is no basis to suggest that the basic remoteness of the area is presenly threatened in any respect.

In reading the Resource Management Plan draft that you are studying for this area, I found that you apparently feel we need more wilderness. I would say that 452,800 acres is an outrageous request. I don't agree with the draft's plan to designate the Parashant areas as a RCA under alternative 2 or as a SRMA as is proposed in Alternative 3. The proposed management methods such as no new permanent grazing permits or no new permanent roads or improved access are not consistent with multiple use management.

I support Alternative 4 in which 77,000 addition acres be designated as wilderness; however, we should be certain that we will have access to the important natural resources.

Sincerely,

Richard D. Stewart

Richard D. Stewart
574 W. Vance Dr.
Kanab, Utah 84741

V-387

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, Utah 84770

Dear Mr Curtis:

After reviewing the Resource Management Plan draft for the Arizona Strip I am in support of alternative 4. However, the Paria Plateaus and Canyons should not be designated an ACEC as recommened in Alternative 3 and 4. The Paria already contains a wilderness area. Proposed prescriptions such as closing the Plateau and canyons to mineral location and woodland product sales or designating the Paria River a wild and scenic river are unnecessary. Protection of the area's various values (cultural, recreation, etc.) could be accomplished just as effectvely by less restrictive management prescriptions. Making these changes would be in the best interest of the majority.

This land is an important source of employment to us in this area. There should be some emphasis places on "long-term" users. There should be some thought to providing incentives to keep them involved as tools for management. This is the most reliable method of ensuring long term upward trends in range and resource condition. Long term, resource useage will continue to provided the much needed jobs, and tax base for our communities.

It isn't our responsibility to create wilderness. Wilderness areas naturally exist because of conditions of nature. I don't feel there is a shortage of "remoteness" on the Arizona Strip. Please consider alternative 4 when making this important decision.

Sincerely,

[illegible]

180 N 100 W #11
Kanab, Ut 84741

May 19, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

I have been of the opinion that part of the BLM's responsibilities is to see that our public lands are not monopolized by any particular group of people. This means that they not only need to be in touch with the needs of the naturalists, but they need to be aware of the needs of those who use the land to provide for their living. To help meet the needs of all these people, the only solution is to let are public lands be used for a variety of things. Proper management is the key to success in this area.

Alternative 4 from the RMP draft would best meet the needs of many people. Steps should be taken to allow for multiple use of these public lands. Logan and Trumbull, Parashant and Black Rock Mountains, woodland areas, and areas now under livestock permits should be designated as Multiple use areas. There needs to be less emphasis on recreation management, especially "primitive" recreation. We need to shift away from this type of single use management. This area needs to remain open to meet the needs of the many who use it, whether for recreational use, or for their livelihood. Our public lands need to be geared towards multiple use.

When making the final decisions about this region, please consider alternative 4. It will meet the needs of all people.

Sincerely,

Jerry A. Howe
Box 243
Kanab, Utah

20 May 1990

Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

Dear Land Managers:

This letter is regarding the Arizona Strip resource management Plan. I object to any logging on Mt. Trumbull and Mt. Logan. I have hunted Turkeys there for over 20 years and watched their numbers increase except for the past few years. Some of our largest Ponderosa trees are on these mountains. I would think it un-economical because of the long distance that logging trucks, men, and equipment would have to travel. The Turkey hunt success rate has always been high and the deer population has been increasing in the past few years.

Sincerely:

Richard T Brown
4318 West Laurie Lane
Glendale, Arizona 85302

May 9, 1990

Mr. Dennis Curtis
Bureau Of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis

It seems that more and more people are trying to take lands away from the majority who need them and give them to the minority who want them. I think that we need to distinguish between desires and needs. We all have to do that with our own finances. It is time to do this when it comes to determining the management methods of our public lands.

A large portion of the lands proposed for additional restrictive management are the same lands recently studied and released from wilderness designation. Congress decided that these lands should be returned to multiple use. However, the Resource Management Plan's new restrictions on these lands would, for all practical purposes, make them wilderness areas. I guess it shows how well federal and state government works together.

Alternatives 2 & 3 go overboard in setting aside excessive wilderness area. I support alternative 4. By adopting this plan, we could still have some land available for multiple use. We need to use these resources, they are critical to our survival in this area.

Thank you

Susan Timpson

P.O. 58
Colorado City, Az
86021

V-389

May 9, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George, UT 84770

Dear Mr. Curtis:

We in this region have felt the pressures of continuely lossing use to our public lands to one thing or another. I do admit the some of the reasons are valid, but we can only handle so much. We are affected by wilderness, wilderness study areas, National parks, reservations, and the newer threat of closing down our timber resources do to the endangered Spotted Owl.

The Resource Management Plan draft for the Arizona Strip focuses narrowly on the only public lands in this area that are still open to multiple use and ignores the broader picture of a region which is largely already withdrawn from multiple use. There is no shortage of land to explore and enjoy when looking for a wilderness experience.

I support Alternative 4. It seems to be best able to meet the demands of the many who use this area.

Thank you,

Charles Timpson
Box 58
Colorado City Az.

ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.

P.O. Box 5241 • Phoenix, Arizona 85010

May 20, 1990

Mr. Dennis Curtis, Team Leader
Arizona Strip District
Bureau of Land Management
390 North 3050 East
St. George, Utah 84770

RE: ARIZONA STRIP DRAFT RESOURCE MANAGEMENT PLAN
AND ENVIRONMENTAL IMPACT STATEMENT

Dear Mr. Curtis:

The Arizona Desert Bighorn Sheep Society, Inc.(*ADBSS*), has reviewed the above referenced documents. Please include the following comments as part of the official public record.

The primary concern of the *ADBSS* is the management and viability of desert bighorn sheep. Although we will address most of our comments to the wildlife portion of the plan, we are interested in the minerals and recreation portions because of their bearing on bighorn sheep management.

MINERAL RESOURCES - OIL AND GAS LEASING

Alternatives 2 and 3 address opening the same number of acres to seasonal restrictions to protect bighorn sheep. It is difficult to tell which alterative will affect the most critical desert bighorn because of the lack of specific detail on the reference maps. | 1

WILDLIFE RESOURCES - BIGHORN SHEEP NUMBERS

ADBSS is concerned about managing bighorn sheep numbers as outlined in Habitat Management Plans and the RMP. The target population number for the Virgin Mountains is 100, but the current estimated population is 125-150. The draft RMP does not address how the BLM would handle this kind of situation when the two numbers do not jive. | 2

05-332

1. Alternatives 2 and 3 in the RMP/EIS provide similar direction for the management and protection of bighorn sheep and their habitat.

2. The target population for bighorn sheep in the Virgin Mountains was apparently conservative. We are pleased that this cooperative bighorn restoration effort has been so successful and that the annual recruitment of bighorns has exceeded expectations. The population of 100 was not intended to be a maximum number. The intent is to manage for optimum populations of bighorns. This means the most favorable populations according to reproductive capability and carrying capacity of the habitat in association with other multiple uses of the public lands.

ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.
P.O. Box 5241 • Phoenix, Arizona 85010

We would like to see bighorn sheep numbers be allowed to expand to maximum numbers consistent with habitat potential in all Arizona Strip bighorn sheep populations. This does not suggest "optimum" numbers" because you have not defined what optimum numbers are. 2

ADBSS disagrees with the suggestion in Altenative 3 not to supplement existing populations. There may come a time when new genetic material or additional animals are needed to suppplement a declining or failing population. It is important to have this important management tool remain available.

CHANGE IN KIND OF LIVESTOCK

ADBSS would support the Preferred Alternative, provided the phrase "unless monitoring studies and research indicates a problem does not exist" is clarified. Is research and monitoring to take place on the allotment where the change in class of livestock is to occur, elsewhere in Arizona, or even another state?

LAMBING ACTIVITIES

ADBSS supports the Preferred Alternative, if expanded to include all Arizona Strip bighorn sheep populations.

EXCLOSURES

ADBSS supports the maintenance and use of the exclosure if the opportunity or need arises or scientific research. We also pose the question as to why this man-made intrusion was allowed to be included within the boundary of the Paiute Wilderness? Such a man-made feature does not meet the non-degredation criteria of the Wilderness Act.

RECREATION RESOURCES - OHV DESIGNATIONS

It is difficult to make an intelligent recommendation on this change agent because only general location maps are provided to show where the limitations and closures will take place.

V-391

ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.
P.O. Box 5241 • Phoenix, Arizona 85010

More detailed maps would be a tremendous asset for reviewing this recommendation. Our main concern is keeping enough vehicular access into bighorn sheep habitat for wildlife management and hunting purposes

EXISTING ROADS

The Preferred Alternative and Alternatives 3 and 4, rehabilitating exhisting roads where no public or administrative need exists. *ADBSS* is concerned about the determination of public need and who makes that determination. We would like to insure key access routes into bighorn sheep habitat remain available for hunter use.

Thank-you for the opportunity to comment on this document.

Sincerely,

Pete Cimellaro, Chairman
ADBSS Legislation Committee

05-333

May 6, 1990

Dennis Curtis
Bureau of Land Management
Arizona Strip District
390 North 3050 East
St. George UT 84770

Dear Mr Curtis:

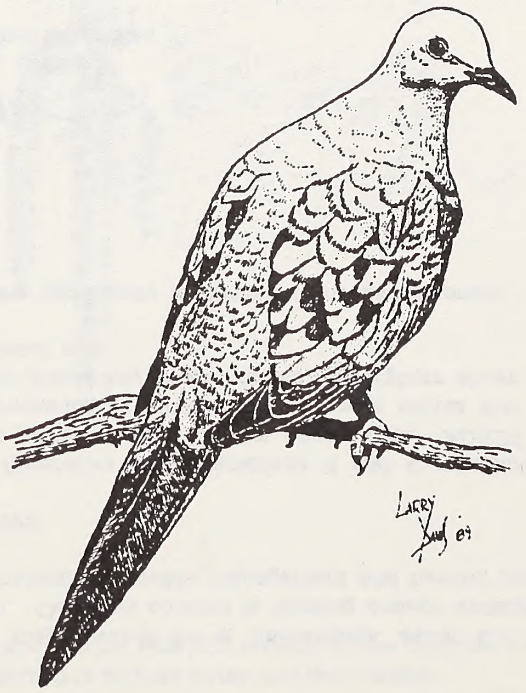
After reviewing the RMP for the Arizona Strip I noticed the similarity of the lands proposed for restrictive management of lands recently studied for and released from wilderness designation. Congress determined that these lands be returned to multiple use. However, the impact of adopting alternitives 2 or 3 of this draft would again reverse the designation of this land.

Congress has established processes for wilderness designations and withdrawal actions. It chose not to designate withdrawel of these areas. Much of the local and national support for the wilderness legislation was based on the release of such lands for multiple use. BLM should not now propose to do what Congress chose not to do.

Alternative 4 would be in harmonly with the previous actions undertaken by the Congress.

Sincerely,

Hailey P. Hassel



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
3616 W. Thomas, Suite 6
Phoenix, Arizona 85019

2-21-88-F-127

May 15, 1990

MEMORANDUM

TO: District Manager, Arizona Strip District, Bureau of Land Management, St. George, Utah

FROM: Field Supervisor

SUBJECT: Biological Opinion for the Arizona Strip Resource Management Plan

This Biological Opinion responds to your request for formal consultation with the Fish and Wildlife Service (FWS), pursuant to Section 7 of the Endangered Species Act of 1973, as amended (Act), on the Arizona Strip District Resource Management Plan (November 1989). Your request was dated January 30, 1990, and received by us on February 6, 1990. The species of concern are: Brady pincushion cactus (Pediocactus bradyi), Siler pincushion cactus (Pediocactus sileri), Welsh's milkweed (Asclepias welshii), woundfin (Plagopterus argentissimus), Virgin River chub (Gila robusta seminuda), desert tortoise (Gopherus agassizii), peregrine falcon (Falco peregrinus anatum), and bald eagle (Haliaeetus leucocephalus). This action will affect Bureau of Land Management (BLM) administered lands in Coconino and Mohave Counties, Arizona.

The following biological opinion is based on information provided in the November 1989, draft Arizona Strip District (District) Resource Management Plan (RMP) and Environmental Impact Statement (EIS), data in our files, and other sources of information.

BIOLOGICAL OPINION

It is my biological opinion that implementation of the Arizona Strip RMP is not likely to jeopardize the peregrine falcon, bald eagle, desert tortoise, Brady pincushion cactus, Siler pincushion cactus, Welsh's milkweed, woundfin, or Virgin River chub or adversely modify or destroy critical habitat of Welsh's milkweed.

BACKGROUND INFORMATION

Project Description

The Arizona Strip RMP will provide guidance for management of public lands, associated resources, and diverse multiple uses on the District over the next fifteen years. The planning area encompasses approximately 2.8 million acres of public lands in the northwest corner of Arizona in the northern portions of Mohave and Coconino Counties. There are few communities within the

district and the human population is low. The only permanent residents live in small communities near the Utah and Nevada borders and along Highway 89A in House Rock Valley. Three highways cross the northern tier of the district. No paved roads extend into the interior, but over 5,262 miles of unpaved roads and trails traverse the area. Most of the development in the interior of the District is related to ranching and includes waters, fences, and other types of rangeland improvements.

The BLM proposes thirteen special management areas totaling 445,000 acres. They include ten Areas of Critical Environmental Concern (ACECs), comprising 59,210 acres; two Resource Conservation Areas (RCAs), comprising 159,000 acres; and one Special Recreation Management Area (SRMA) of 227,000 acres.

About 17,170 acres would be available for various public purposes around communities. Proposed acquisition and exchange programs are focused on 147,600 acres of State land and 9,700 acres of private land. The City of Page, Arizona anticipates the need for expanded airport facilities within the next decade. Land would also be made available for an expansion of the Colorado City airport.

All of the District would receive some form of off-highway vehicle (OHV) designation. In general, OHV use would become more regulated. OHV use off of existing roads and trails would be prohibited except in designated open areas. No new permanent roads would be allowed in areas where special or remote values are to be protected. Roads not needed for resource management or which contribute to resource damage would be closed. OHV use would be limited to existing roads on approximately 71 percent (1,811,900 acres) of the District, limited to designated roads on 27 percent (690,400 acres), prohibited on 1 percent (45,100 acres), and unrestricted on 1 percent (1,400 acres).

Species Description

Brady Pincushion Cactus. The Brady pincushion cactus was listed as an endangered species on October 26, 1979, without critical habitat. This small, semi-globose cactus has one (occasionally more) stem up to 6 centimeters (cm) tall and 5 cm in diameter. It grows on benches and terraces at 3850-4500 feet elevation in the Navajoan Desert on the rims of the plateaus along the Colorado River in House Rock Valley. The substrate is composed of Kaibab limestone chips overlying soil derived from Moenkopi shale and sandstone outcrops. Dominant plant species in the community are shadscale (Atriplex confertifolia), snakeweed (Gutierrezia sarothrae), Mormon tea (Ephedra viridis), and desert trumpet (Eriogonum inflatum). BLM administers about 11,000 acres of known habitat for this species. Several plots have been established wherein several hundred cacti were tagged to determine demographic information and impacts on the population. The limited distribution and small number of populations make this species vulnerable to

extinction. OHV traffic is the most serious threat to this species. Illegal collection and pesticide application are also current threats. Uranium mining and exploration could potentially cause the loss of habitat. A recovery plan and habitat management plan have been developed for this species.

Siler Pincushion Cactus. The Siler pincushion cactus was listed as an endangered species on November 20, 1979, without critical habitat. This cactus is a small, solitary, or occasionally clustered, globose cactus about 5 inches tall (exceptional specimens reach 18 inches) and 3-4 inches in diameter. The Siler pincushion cactus grows on gypsiferous clay and sandy soils of the Moenkopi Formation. The rounded hills often support a sparser vegetation than adjacent areas of different substrate. Habitat is characterized by desert scrub vegetation in transitional areas between the Navajoan Desert, Sagebrush Desert, and the Mohavean Desert. This cactus is found at elevations between 2,800 and 5,400 feet on all aspects of the hills and on slopes varying from 0-80 degrees. All known localities of this species occur in Kane and Washington counties, Utah, and in northern Mohave and northwestern Coconino counties, Arizona. The eastern edge of the species' potential habitat boundary occurs in the vicinity of Fredonia in Coconino County, Arizona. Its western limit is just southwest of St. George, Washington County, Utah. Studies are on-going to determine population trend, level of threats, and impacts on the biology of the plants. This cactus is vulnerable to human-caused impacts because of its specific habitat requirements. Threats include illegal collection, herbivory by unknown animals, uranium mining and exploration, off-road vehicle disturbance, and pesticide application. A recovery plan and habitat management plan have been developed for this species.

Welsh's Milkweed. Welsh's milkweed was listed as a threatened species on October 28, 1987, with critical habitat. Critical habitat designated for this species includes about 4,000 acres of sand dunes in the Coral Pink Sand Dunes and the Sand Hills in Kane County, Utah. Welsh's milkweed is a rhizomatous, herbaceous perennial, 10-40 inches tall, with large, oval leaves. It occurs in open, sparsely vegetated, semi-stabilized sand dunes and on the lee slopes of actively drifting sand dunes. Several thousand individuals are known from a few concentrated areas on the Coral Pink Sand Dunes and the Sand Hills of Kane County, Utah. Within the District, small populations are known from the Paria-Vermillion Cliffs Wilderness Area near the Utah/Arizona border in Kane County, Utah and Coconino County, Arizona. Limited habitat and a small number of populations have made Welsh's milkweed vulnerable to human-caused threats. OHV activity is destroying individual Welsh's milkweed plants and adversely modifying the species' habitat.

Woundfin. The woundfin was listed as an endangered species on October 13, 1970, without critical habitat. It is a small, silver minnow which inhabits shallow runs and riffles. The woundfin was originally distributed throughout

the Virgin, lower Colorado, and lower Gila rivers. It is now found only in the Virgin River in Utah, Arizona, and Nevada. Woundfin range from LaVerkin Springs on the mainstream of the Virgin River and the lower portion of LaVerkin Creek in Utah downstream to Lake Mead. Twelve miles of river habitat occur within the portion of the Virgin River managed by the District. Distribution of woundfin shows a strong preference for swift, shallow, turbid stream runs with sandy bottoms.

Virgin River Chub. The Virgin River chub was listed as an endangered species on August 24, 1989. Critical habitat was proposed on June 24, 1986, but has not yet been finalized. Proposed critical habitat is located in the Utah portion of the Virgin River and in Arizona from the Nevada border upstream to the mouth of the Virgin River "Narrows" (T41N, R14W, west boundary Section 31). The Virgin River chub is a silvery, medium-sized minnow that averages about eight inches in total length. It is most common in deep areas where waters are swift, but not turbulent, and is generally associated with boulders or other cover. The Virgin River chub is endemic to 134 miles of the Virgin River in southwest Utah, northwest Arizona, and southeast Nevada. Its range is restricted to 50 miles of the Virgin River between LaVerkin, Utah and Mesquite, Nevada. Major river modifications, primarily water diversions and impoundments, are responsible for the decrease in range and numbers of this species. Potential threats to the species' survival include water withdrawals, impoundments, sedimentation, pollution, channel alteration, disease, and competition and/or predation by introduced species.

Desert Tortoise. The Mojave population of the desert tortoise was listed as a threatened species on April 2, 1990, without critical habitat. The desert tortoise is a relatively large reptile, with adults measuring up to 15 inches in shell length. This species inhabits the Mohave, Colorado, Sonoran, and Sinaloan deserts in the southwestern United States and adjacent Mexico. Recent studies based on shell shape and variations in genetic composition indicate that the species has two distinct populations, with the Colorado River serving as an isolating barrier. The Mojave population of the desert tortoise includes all of that species inhabiting areas north and west of the Colorado River in California, southern Nevada, southwestern Utah, and northwestern Arizona. In the Mohave desert west of the Beaver Dam and Virgin Mountains and in the Pakoon Basin, historic and potential tortoise habitat occupies some 350 square miles of the District. Tortoises occur in creosote bush (Larrea tridentata), cactus, shadscale scrub habitats, and Joshua tree (Yucca brevifolia) woodlands. Vandalism, collecting, raven predation, and disease have resulted in population declines. Habitat conditions have deteriorated and/or habitat has been lost in certain localities due to urban, energy, and mineral development; conversion of native habitats to agriculture; vehicle-oriented recreation; grazing; military activities; and other uses.

Peregrine Falcon. The peregrine falcon was listed as an endangered species on October 13, 1970. It is a medium-sized, blue-gray falcon which inhabits rocky, steep cliffs, preferably near water. The peregrine falcon is found in the District and may inhabit the area during the entire year. Recorded data on population numbers, trend, ecology, and habitat use patterns are lacking. Several eyries have been identified and many others are suspected. The birds themselves have been observed and reported on numerous occasions in the District over the past twenty years. Peregrine falcons have been documented as occurring in Paria Canyon, Vermillion Cliffs, Kanab Canyon, Hack Canyon, near Fredonia, Marble Canyon, House Rock Valley, Lee's Ferry, Hurricane Cliffs, the Virgin Mountains, Parashant Canyon, Andrus Canyon, and the Upper Grand Wash Cliffs. A five-year peregrine falcon survey initiated in 1988, indicates that peregrine nesting and use of the District has increased. Eight nest sites were identified in 1989, compared to four in 1988.

Bald Eagle. The bald eagle was listed as an endangered species on March 11, 1967, without critical habitat. It is a large eagle with a white head and tail in the adult; immature eagles are dark or mottled. For nesting, bald eagles require large trees or cliffs near water with abundant fish. They spend the winters along major rivers, reservoirs, or in areas where fish and/or carrion is available. Fish are the primary food source for nesting eagles. Waterfowl, rabbits, and carrion are important food items for transient and wintering eagles. Bald eagles were historically found throughout the United States, Canada, and northern Mexico. In Arizona, wintering eagles are now found along rivers and major reservoirs. Migrating bald eagles occur infrequently in the District during winter. Major causes of decline in this species include degradation and loss of riparian habitat, pesticide-induced reproductive failure, shooting, and human disturbance.

EFFECTS OF THE ACTION

Brady Pincushion Cactus. The entire known Brady pincushion cactus population in the District would be included in the 10,700 acres of habitat designated as the Marble Canyon ACEC. The potential habitat in the Marble Canyon area is estimated to be 17,000 acres but within this area plants have been located on only 10-20 percent of the potential habitat that was searched. Management prescriptions would restrict OHV activity to designated roads which would reduce the incidence of vehicles crushing or otherwise damaging cacti. Mineral exploration and development activities would not be prohibited but would require an approved plan of operation. This requirement would extend the review period from 15 to 30 days. If substantial public interest is expressed, the review may be extended up to 90 days. Special status species found within the area of proposed operations will be protected from adverse impacts. Increased law enforcement patrols would reduce illegal collecting. No restrictions have been placed on pesticide application in the ACEC.

Siler Pincushion Cactus. Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring include 4,200 acres of Siler pincushion cactus habitat, approximately 8 percent of the estimated potential habitat. Populations occurring in the Fort Pierce ACEC may still be adversely affected by vegetation manipulation. Although OHV traffic would be restricted to existing roads and trails, populations in all four ACECs would still be subject to some degree of illegal collecting due to a lack of road closures. Allowing OHV traffic to continue in the ACECs may result in continued illegal cross-country travel and possible crushing of cacti. All four ACECs would be open to mineral location, although a plan of operation would be required. Requiring a plan of operation would extend the public review process and require avoidance of adverse impacts to threatened or endangered species. Populations and individuals of Siler pincushion cactus that occur outside of ACEC boundaries would continue to experience adverse impacts from illegal collection, uranium mining and exploration, OHV disturbance, and pesticide application.

Welsh's Milkweed. Welsh's milkweed occurs in Arizona in the Paria-Vermillion Cliffs Wilderness area near the Utah/Arizona border in Kane County, Utah and Coconino County, Arizona. This wilderness designation should provide adequate protection for this species by excluding OHV activity. Welsh's milkweed should receive additional protection from the Canyons and Plateaus of the Paria ACEC surrounding the Paria Wilderness, which limits OHV activity to designated roads and trails.

Woundfin. The woundfin would benefit from regulation of other land use activities along the Virgin River. Management prescriptions for the Virgin River ACEC would include acquiring high value riparian private/state properties along the river, limiting OHVs to designated roads, and closing bottomlands to material sales. Plans of operation would be required for mineral exploration and development, which would extend the public review process and require avoidance of impacts to threatened and endangered species.

Virgin River Chub. The Virgin River chub would benefit from regulation of other land use activities along the Virgin River. Management prescriptions for the Virgin River ACEC would include acquiring high value riparian private/state properties along the river, limiting OHVs to designated roads, and closing bottomlands to material sales. Plans of operation would be required for mineral exploration and development, which would extend the public review process and require avoidance of impacts to threatened and endangered species.

Desert Tortoise. Under the preferred alternative, 210 acres of low density desert tortoise habitat are identified for potential transfer by lease or sale. If the 210 acres of tortoise habitat are sold, there would be a net loss of desert tortoise habitat in Federal ownership. If exchanged, the 210

acres plus an additional 2,927 acres would be traded for better quantity or quality tortoise habitat in the same area, resulting in a net gain in Federally managed tortoise habitat. The existing Navajo-McCullough right-of-way corridor would continue in desert tortoise habitat, creating a small degree of fragmentation. All future right-of-way authorizations would be routed, constructed, and maintained in a manner that would avoid adverse impacts to the desert tortoise to the maximum extent possible.

A total of 20,800 acres of tortoise habitat would be included in the Beaver Dam Slope ACEC, or approximately 9 percent of the estimated 224,000 acres of tortoise habitat that occurs on the Arizona Strip. Mineral location would still be allowed within the Beaver Dam ACEC, although a plan of operation approval would be required for all mining operations exceeding casual use. Requiring a plan of operation would extend the public review process and require avoidance of adverse impacts to threatened or endangered species. The Beaver Dam ACEC would be closed to OHV activity and mineral material disposals. Closure to OHV activity will reduce the incidence of illegal collection and potential crushing of individuals by vehicles. Tortoises existing in areas not defined as ACECs would continue to experience adverse impacts from OHV activities, grazing, vandalism, mineral exploration and development, and illegal collecting.

Peregrine Falcon. If riparian conditions improve, the quality of habitat for a number of bird species should increase and, consequently, improve the peregrine falcon prey base. Lease stipulations for leasable mineral exploration and development would be applied to protect peregrine falcons during breeding and nesting season. This restriction would allow exploration activity only during the period between August 1 and March 1. The restriction would apply to areas open to lease within one mile of superior, acceptable, or historic peregrine habitat in the following areas: Grand Wash Cliffs, Dansil Canyon, Andrus Canyon, Grama Canyon, Hack Canyon, Kanab Creek, Marble Canyon, and the Vermillion Cliffs.

Bald Eagle. The bald eagle, an infrequent visitor to the District during migration, should benefit from improved riparian habitat conditions for both perching and foraging.

Cumulative Effects

Cumulative effects are future State or private activities affecting endangered or threatened species or critical habitat that are reasonably certain to occur in the project area. Future Federal actions will be subject to consultation requirements of Section 7 of the Endangered Species Act and, therefore, are not considered cumulative to the proposed project.

Actions on private lands, such as urbanization, recreation, and grazing, will continue to contribute to habitat degradation and loss. The communities of Littlefield, Colorado City, and Fredonia are expected to continue to grow, causing increased human-induced impacts on nearby areas.

INCIDENTAL TAKE

Section 9 of the Endangered Species Act, as amended, prohibits any taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct) of listed species without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Under the terms of Section 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the agency action is not considered taking within the bounds of the Act, provided that such taking is in compliance with the following Incidental Take statement.

The FWS does not anticipate that the proposed action will result in any incidental take of peregrine falcon, bald eagle, Virgin River chub, or woundfin. Should any take of these species occur, the BLM must reinitiate formal consultation with the FWS and provide the circumstances surrounding the taking. Based on the analysis of impacts provided above and the Terms and Conditions stated below, the FWS anticipates that incidental take of desert tortoise, in the form of harm, may result from disposal of 210 acres of desert tortoise habitat.

The FWS is assuming that the stipulations contained in the Opinion, as Reasonable and Prudent Measures and Terms and Conditions to minimize take, will reduce the potential for take of tortoise habitat associated with the proposed action. This Opinion does not authorize take in the form as the collection of tortoises for pets. Any person found engaging in such an activity will be liable for prosecution.

Reasonable and Prudent Measures

The FWS believes that the following Reasonable and Prudent Measures are necessary and appropriate to minimize the incidental taking authorized by this Biological Opinion:

1. The BLM shall compensate for the long-term loss and fragmentation of tortoise habitat through acquisition of private lands which would be subsequently managed for the benefit of desert tortoises.

2. If take which occurs as a result of this action exceeds that specified in the Incidental Take Statement above, the BLM shall reinitiate formal consultation with the FWS to review those activities which resulted in excessive take.

Terms and Conditions

To implement the Reasonable and Prudent Measures contained in this opinion, the BLM shall acquire 1,050 acres of desert tortoise habitat to be managed, in perpetuity, for the benefit of desert tortoises. The FWS believes this is an appropriate measure to minimize take because of the increased tortoise management capabilities that BLM ownership should bring to previously private lands. Criteria used to evaluate land to be acquired should include the location of the land, its current status and condition, and its proximity to other tortoise habitat that is currently being managed for tortoise values. The BLM shall designate permanent withdrawals for mineral and energy exploration and development and grazing, and close the area to off-highway vehicles and all rights-of-way and easements. Road construction shall also be prohibited.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are FWS suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information. The FWS recommends implementation of the following actions:

1. The FWS recommends that Marble Canyon, Beaver Dam, Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring ACECs be closed to mineral location to avoid adverse impacts to endangered plants and desert tortoise.

2. The FWS recommends that the Fort Pierce, Lost Spring Mountain, Moonshine Ridge, and Johnson Spring ACECs be closed to ORV traffic to reduce incidence of vehicle crushing of Siler pincushion cactus as a result of cross-country travel and to deter illegal collection of Siler pincushion cactus.

3. The FWS recommends that all Category I desert tortoise habitat be included in ACEC designations. ACEC designations will facilitate special management recommendations for this species.

This concludes formal consultation on the Arizona Strip RMP. Reinitiation of formal consultation is required if the amount or extent of incidental take is exceeded, if new information reveals effects of the action that may affect



05-334 (continued)

listed species or critical habitat in a manner or to an extent not considered in this opinion, if the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion, and/or if a new species is listed or critical habitat designated that may be affected by the action. If we may be of further assistance, please contact Sherry Barrett or me (Telephone: 602/379-4720 or FTS 261-4720).

Sam F. Spiller

cc: Field Supervisor, Fish and Wildlife Service, Reno, Nevada
Field Supervisor, Fish and Wildlife Service, Salt Lake City, Utah
Field Supervisor, Fish and Wildlife Service, Ventura, California
Field Supervisor, Fish and Wildlife Service, Laguna Niguel, California
State Director, Bureau of Land Management, Phoenix, Arizona
Director, Arizona Game and Fish Department, Phoenix, Arizona
Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico (FWS/HC)
Director, Fish and Wildlife Service, Washington, DC (EHC)

BLM Response to 05-334

UNITED STATES DEPARTMENT OF THE INTERIOR (010)
BUREAU OF LAND MANAGEMENT 6840
ARIZONA STRIP DISTRICT

MEMORANDUM

To: Field Supervisor, Phoenix

From: District Manager, Arizona Strip

Subject: Arizona Strip District RMP Section 7 Consultation

This letter is in response to the Biological Opinion dated May 15, 1990, for the Arizona Strip Resource Management Plan (RMP) and follows up on a phone conversation between Sherry Barrett, Eddie Guerrero, and Tim Duck.

I am requesting reinitiation of consultation in relation to the Biological Opinion and associated terms and conditions for the sale/exchange of 210 acres of historic tortoise habitat.

The Biological Opinion states "Reinitiation of formal consultation is required...if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion".

I feel that the Bureau's failure to provide specific information in regards to the 210 acre land sale/exchange in the RMP possibly resulted in the terms and conditions.

I suggest that we change the wording in the RMP to state that "consultation with USFWS will occur when the Recreation and Public Purpose Act permit (R&PP) for the 210 acre land sale/exchange is received". This would provide us the opportunity to fully analyze the proposed action at the time of submission of the R&PP and allow us to submit to the Service a site specific Environmental Assessment which would provide a thorough description of the proposed action, the status of the tortoise and habitat, as well as an evaluation of impacts. The Bureau would at that time propose any necessary mitigation or compensation requirements.

We ask the Service to amend the Biological Opinion by removing the Terms and Conditions requiring the Bureau to acquire 1,050 acres of tortoise habitat and accepting the suggested wording as mentioned above.

We appreciate your attention in this matter. Please direct your response to this request to Dennis Curtis, RMP Team Leader, at our district office.

EGUERRERO/lb;07/09/90;RMPsec7

A. William Lamb

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
3616 W. Thomas, Suite 6
Phoenix, Arizona 85019

2-21-88-F-127

August 28, 1990

MEMORANDUM

TO: District Manager, Arizona Strip District, Buraau of Land Managemant, St. George, Utah (Attention: Dennis Curtis)

FROM: Field Supervisor

SUBJECT: Amendment to Biological Opinion for the Arizona Strip Resource Management Plan (Number 2-21-88-F-127)

This amendment to the subject Biological Opinion is in response to your memorandum dated July 11, 1990, regarding the Terms and Conditions for Reasonable and Prudent Measure Number 1. This Reasonable and Prudent Measure states:

> The Bureau of Land Management (BLM) shall compensate for the long-term loss and fragmentation of tortoise habitat through acquisition of privata lands which would be subsequently managed for the benefit of desert tortoises.

The Terms and Conditions for the above Reasonable and Prudent Measure in tha subject Biological Opinion are hereby amended as follows:

> Terms and Conditions
>
> To implament Reasonable and Prudent Measure Number 1 contained in Biological Opinion Number 2-21-88-F-127, the BLM shall compensate for loss of desert tortoise habitat through acquisition or restoration of other dasart tortoise habitat. Type, location, and magnitude of the compensation will be determined through a separate Section 7 consultation upon recaipt of the Recreation and Public Purpose Act permit (R&PP) proposal for the land sale/exchange.

We agree with your memorandum that assessment of the impacts from disposal of 210 acres of desert tortoise habitat would be facilitated by receipt of more specific information on the action. Information should include, at a minimum, a description of the proposed action, a description of the affected environment, analysis of the effects of the action, cumulative effects, and conclusions on how the action will affect the desert tortoise.

As you are aware, the desert tortoise Management Oversight Group will discuss standards for mitigation/compensation for incidental take of tortoises and their habitat at the October 3, 1990, meeting. Delaying determination of compensation for this land disposal will allow the Fish and Wildlife Service and the BLM to reach an agreement on fair and adequate compensation throughout the range of the desert tortoise.

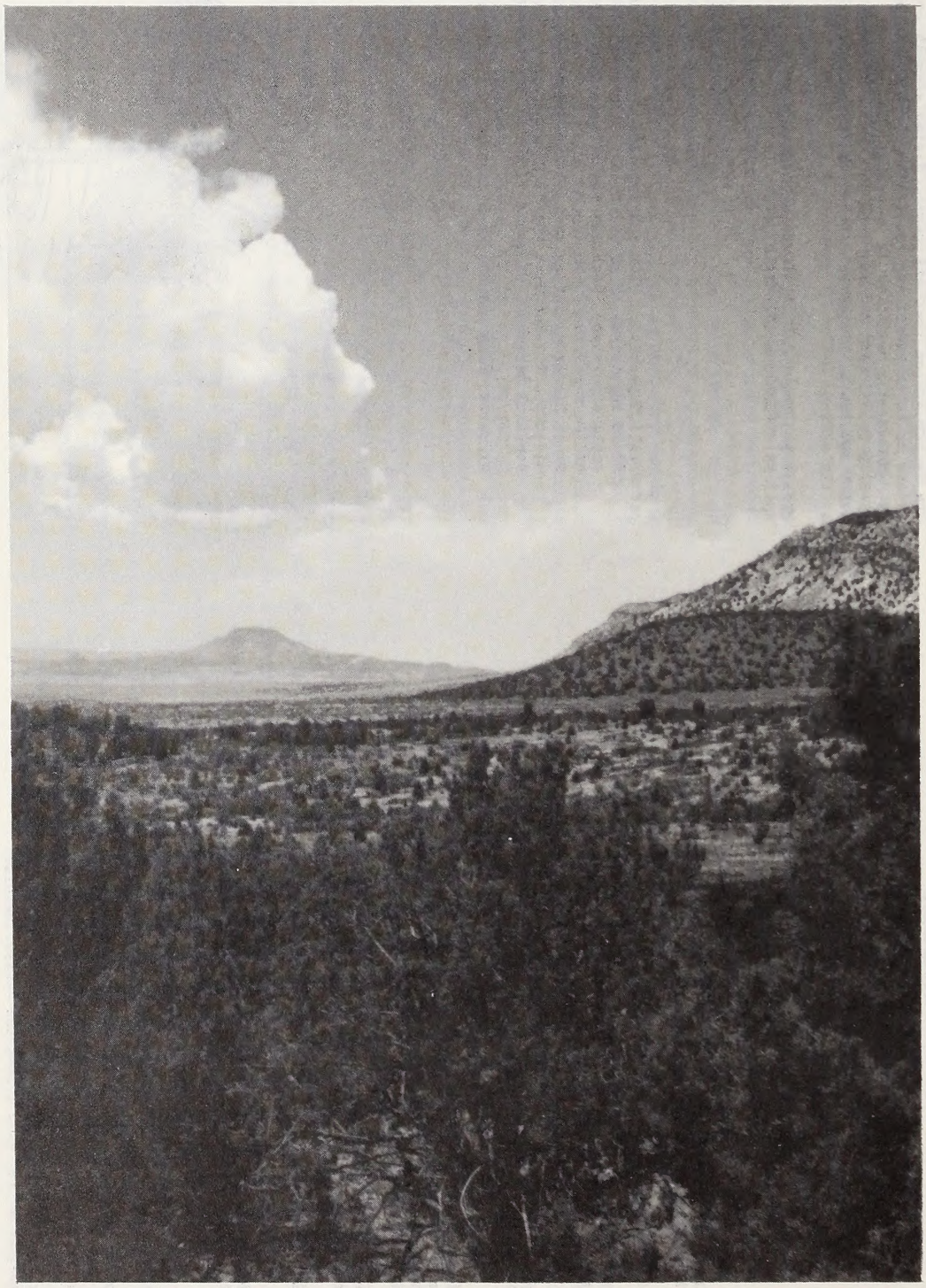
As required by 50 CFR 402.16, reinitiation of formal consultation for the Arizona Strip Resource Management plan is required if: 1) the amount or extent of incidental take is reached, 2) new information reveals effects of the agency action that may impact listed species or critical habitat in a manner or to an extent not considered in this opinion, 3) the agency action is subsequently modified in a manner that causes an effect to a listed specias or critical habitat that was not considered in this opinion, or 4) a new species is listed or critical habitat designated that may be affected by the action.

Should you require further assistance, please contact Sherry Barrett or San Spiller (Telephone:602/379-4720).

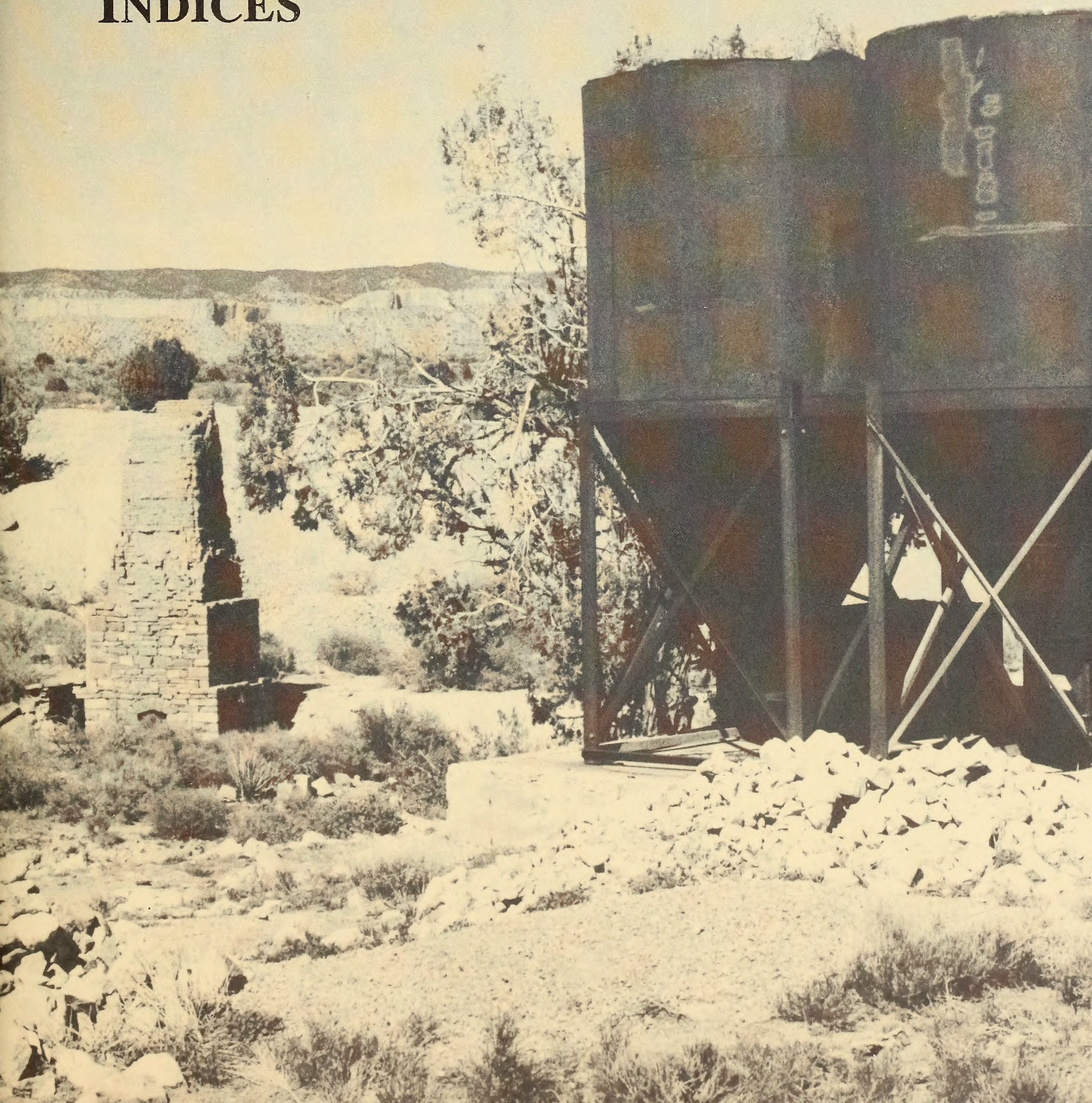
Sam F. Spiller

cc: Field Supervisor, Fish and Wildlife Sarvice, Reno, Nevada
Field Supervisor, Fish and Wildlife Service, Salt Lake City, Utah
Field Supervisor, Fish and Wildlife Service, Ventura, California
Office Supervisor, Fish and Wildlife Service, Laguna Niguel, California
State Director, Bureau of Land Management, Phoenix, Arizona
Director, Arizona Game and Fish Department, Phoenix, Arizona
Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico (FWE/HC)
Director, Fish and Wildlife Service, Washington, DC (EHC)





Appendices
Glossary
References
Indices



APPENDIX 1
ALLOTMENT CATEGORIZATION

"I" IMPROVE CATEGORY ALLOTMENTS

Allotment		Current	Proposed	Stage of
Name	Number	Management	Management	Implementation
Atkin Well	5207	Season Long	Deferred	Not
Beanhole	5334	Rest Rotation	Rest-Rotation	Implemented
Belnap	4849	Season Long	Deferred	Not
Belnap West	4822	Season Long	Deferred	Not
Big Spring	4871	Season Long	Deferred	Not
Big Spring Pipeline	4870	Season Long	Deferred	Not
Black Canyon	4837	Deferred	Deferred	Implemented
Blake Pond	4813	Deferred	Deferred	Implemented
Blue Pools UT	5312	Season Long	None Written	Not
Buffalo Tank	5335	Deferred	Deferred	Implemented
Canaan Gap	5205	Deferred	Deferred	Implemented
Cedar	5258	Season Long	Unsigned	Not
Cedar Knoll	5318	Rest-Rotation	Rest-Rotation	Implemented
Chatterly	5307	Deferred	Deferred	Partial
Clayhole	5215	Rest-Rotation	Rest-Rotation	Implemented
Cold Spring	4873	Season Long	Deferred	Not
Cole Spring	4872	Season Long	Deferred	Not
Cottonwood	4809	Season Long	Deferred	Partial
Coyote	5327	Season Long	Deferred	Partial
Cram	5333	Season Long	Deferred	Partial
Crosby Tank	5219	Season Long	Deferred	Partial
Fern Tank	5217	Best Pasture	Best Pasture	Implemented
Ferry Swale	5336	Season Long	None	Not
Ferry Swale UT	5342	Season Long	None	Not
Flat Top Well	5214	Deferred	Deferred	Implemented
Franks Reservoir	5325	Season Long	Deferred	Not
Fuller Road	5324	Deferred	Deferred	Implemented
Grassie Mountain	4825	Deferred	Deferred	Partial
Gunsight	5320	Season Long	Deferred	Partial
Hacks Canyon	5232	Season Long	Rest-Rotation	Not
Haslem Spring	5201	Season Long	Deferred	Not
Haslem Spring UT	5239	Season Long	Deferred	Not
Hat Knoll	4837	Deferred	Deferred	Implemented
Hidden Spring	4803	Season Long	Rest-Rotation	Partial
Homestead	5253	Season Long	Deferred	Not
House Rock	533	Deferred	Deferred	Implemented
Hurricane Rim	5254	Deferred	Deferred	Implemented
Imlay	4817	Season Long	Deferred	Not
Ivanpah	4858	Deferred	Deferred	Implemented
Jump Canyon	4801	Deferred	Deferred	Implemented
June Tank	5221	Rest-Rotation	Rest-Rotation	Implemented
Lambing	4838	Deferred	Deferred	Implemented
Lee's Ferry	5337	Deferred	Deferred	Implemented
Link Spring	4819	Season Long	Deferred	Not
Littlefield Community	4827	Season Long	Season Long	Implemented
Loco Point	5260	Season Long	Unsigned	Not
Lower Hurricane	4837	Deferred	Deferred	Implemented
Lytle Spring	5252	Season Long	Deferred	Not
Meeks Reservoir	5259	Season Long	Unsigned	Not

APPENDIX 1 (CONTINUED)
ALLOTMENT CATEGORIZATION

"I" IMPROVE CATEGORY ALLOTMENTS

Allotment		Current	Proposed	Stage of
Name	Number	Management	Management	Implementation
Mesquite	4832	Less Intensive	Less Intensive	Implemented
Mud & Cane	4850	Deferred	Deferred	Partial
Mustang Spring	4859	Season Long	Deferred	Partial
Navajo Well	5348	Deferred	Deferred	Implemented
Pakoon Spring	4800	Season Long	Rest-Rotation	Planning
Pigeon Tank	5322	Deferred	Deferred	Implemented
Pocum Tank	4840	Deferred	Deferred	Implemented
Pratt Tank	5314	Rest-Rotation	Rest-Rotation	Implemented
Quail Canyon	4856	Deferred	Deferred	Implemented
Red Pond	4806	Season Long	Deferred	Not
Rock Reservoir UT	5345	Season Long	Deferred	Not
Scotties Seep	5236	Season Long	Deferred	Partial
Short Creek UT	5240	Season Long	Deferred	Not
Signature Rock	5350	HGM	HGM 8 Past	Implemented
Soap Creek	5332	Season Long	Deferred	Partial
Sullivan Tank	4816	Deferred	Deferred	Implemented
Sunshine	4863	Season Long	Deferred	Not
Sunshine Tank	5247	Season Long	Deferred	Partial
Temple Trail	5216	Deferred	Deferred	Implemented
Tuweep	5220	Rest-Rotation	Rest-Rotation	Implemented
Two Mile	5328	Deferred	Deferred	Implemented
Vermillion	5329	Deferred	Deferred	Partial
White Sage	5349	Rest Rotation	Rest-Rotation	Implemented
Wildband	5223	Deferred	Deferred	Implemented
Wildcat	4854	Season Long	Deferred	Partial
Wolfhole Canyon	4811	Deferred	Deferred	Partial
Wolfhole Lake	4823	Season Long	Deferred	Not
Wolfhole Mountain	4839	Deferred	Deferred	Partial

"M" MAINTAIN CATEGORY ALLOTMENTS

Allotment		Current
Name	Number	Management
Antelope	5206	Season Long
Antelope Spring	5210	Season Long
Badger Creek	5341	Less Intensive
Beaver Dam Slope	4828	Deferred
Black Rock	4841	Deferred
Brown & Shumway	5302	Deferred
Cane Beds	5212	Less Intensive
Cedar Pockets	4866	Deferred
Cedar Wash	4842	Less Intensive
Clay Spring	4845	Deferred

APPENDIX 1 (CONTINUED)
ALLOTMENT CATEGORIZATION

"M" MAINTAIN CATEGORY ALLOTMENTS

Allotment		Current
Name	Number	Management
Cottonwood	5209	Season Long
Cowboy Butte	5310	Rest-Rotation
Coyote	4805	Season Long
Diamond Butte	4833	Season Long
Duncan Tank	4820	Deferred
Glazier Dam	5202	Deferred
Grama Point	5233	Deferred
Highway	4812	Deferred
Hurricane Cliff	5251	Season Long
Jackson Tank	4830	Deferred
Jacob Canyon	5317	Season Long
Lamb Tank	5257	Rest-Rotation
Last Chance	4815	Deferred
Little Tank	4853	Deferred
Little Wolf	4814	Rest Rotation
Lizard	4857	Deferred
Lynn & Tone	5211	Season Long
Mainstreet	4808	Best Pasture
Moonshine	5237	Deferred
Mormon Well	4844	Season Long
Mosby	4835	Deferred
Mosby-Nay	4836	Less Intensive
Mount Trumbull	4826	Deferred
Mule Canyon	4821	Deferred
Pa's Pocket	4848	Season Long
Pakoon	4802	Deferred
Penn's Well	4852	Season Long
Pipe Spring	5235	Rest-Rotation
Pipe Valley	5242	Season Long
Point of Rock	5241	Season Long
Purgatory Canyon	4831	Season Long
Rock Canyon Tank	5319	Deferred
Rock Pockets	5213	Deferred
Shuttleworth	5315	Less Intensive
Sullivan Canyon	4810	Deferred
Swapp Tank	5248	Deferred
Tassi	4851	Less Intensive
Toquer Tank	4861	Deferred
Valley Wash	5234	Rest-Rotation
Wells	5208	Season Long
White Pockets	5243	Season Long
Whiterock-Soapstone	4804	Deferred

APPENDIX 1 (CONTINUED)
ALLOTMENT CATEGORIZATION

"C" CUSTODIAL CATEGORY ALLOTMENTS

Allotment		Current
Name	Number	Management
Antelope Island	5306	Season Long
Button	5308	Less Intensive
Cedar Ridge	5303	Less Intensive
Cove	5204	Season Long
Dripping Spring	4818	Season Long
Eight Mile Pass	5304	Season Long
Faught Place	4807	Season Long
Ferrin	5246	Season Long
Grama Springs	5225	Less Intensive
Gulch	5230	Less Intensive
Hacks	5227	Less Intensive
Harris Well	5238	Season Long
Highway	5309	Season Long
Home Ranch	4855	Season Long
Iverson	4834	Season Long
Joe	5245	Season Long
Kanab Creek	5321	Season Long
Kanab Gulch	5224	Season Long
Lane	5271	Season Long
Littlefield Free Use	4843	Season Long
Lost Spring Gap	5300	Season Long
Mountain Sheep	4806	Season Long
Parashant	4829	Deferred
Pat's Pond	4862	Season Long
Rider	5305	Less Intensive
Rock Canyon	5200	Season Long
Rosenberry	4846	Season Long
Russel Fields	5269	Season Long
Sage	5311	Season Long
Shinarump	5301	Season Long
Short Creek	5270	Season Long
Stateline	5244	Season Long
Wahweep	5340	Season Long

Many allotments have been moved to "M" from "I" as improvements occur due to management. Other allotments are moved into "I" when problems occur. Recategorization is an ongoing process.

APPENDIX 2
RANGELAND TREND

Rangeland vegetative trend (the direction of change in livestock forage condition observed over time) is determined through 200 permanently located plot transects measured every 2 to 5 years. Parameters observed in the transects are occurrence of plant species, composition and density, frequency of bareground, and dead plant litter. Recurring observations measure any significant changes in the above parameters.

Plant species are highly responsive to rainfall, other climatic factors and the effects of grazing. These factors are interrelated and must be recognized in implementing management actions. Plant growth is often more responsive to the timing of rainfall than to the amount received. Growth is maximized when moisture is received during the growing season. Grazing is more subtle in its effect on plants. Moderate grazing will have little impact over the long term. If a plant is grazed heavily on a continuous basis it is reduced in vigor, size and frequency. This is especially so during drought.

Vegetative trend data on the Arizona Strip are available for the years 1981-88 on 491 of the 530 key areas. These data show 187 key areas of upward trend, 254 with static trend, and 50 with downward trend. These data along with utilization ranges of key species for 1986-88 are shown on Appendix 2.

Allotments showing unsatisfactory utilization levels and/or downward trend are evaluated to determine cause and corrective measures are taken by change in grazing system or management direction as priorities allow.

RANGELAND TREND/UTILIZATION AS OF 1988

SHIVWITS RESOURCE AREA

Allotment	Number of Key Areas			Utilization Range
	*Up	*Static	*Down	For Key Species
Beaver Dam Slope	4	0	0	11 to 34%
Belnap West	1	0	0	30 to 37%
Big Spring Pipeline	0	2	1	49 to 54%
Black Rock	2	5	0	4 to 55%
Blake Pond	2	2	0	26 to 66%
Cedar Pockets	0	0	1	16 to 34%
Cedar Wash	1	2	0	13 to 21%
Clay Spring	2	2	1	11 to 70%
Cottonwood	0	2	0	16 to 35%
Coyote Spring	1	0	0	10 to 31%
Diamond Butte	2	1	0	10 to 44%
Duncan Tank	1	1	1	19 to 54%
Grassie Mountain	4	1	0	0 to 0%
Hidden Spring	1	1	0	14 to 53%
Highway Pasture	0	1	0	11 to 35%
Imlay	1	2	0	30 to 47%
Ivanpah	2	1	1	8 to 46%
Jackson Tank	1	1	0	19 to 40%
Jump Canyon	4	3	0	41 to 80%
Lambing	2	7	0	25 to 63%
Last Chance	0	2	0	17 to 28%
Link Spring	1	1	0	11 to 59%
Little Tank	3	1	0	20 to 45%
Littlefield Community	0	7	0	16 to 56%
Littlefield Free-Use	0	2	0	12 to 52%
Lizard	1	0	0	31 to 33%
Lower Hurricane	6	2	0	10 to 59%
Mainstreet	12	4	1	6 to 41%
Mesquite Community	0	6	0	8 to 48%

APPENDIX 2 (CONTINUED)
RANGELAND TREND/UTILIZATION AS OF 1988

SHIVWITS RESOURCE AREA

Allotment	Number of Key Areas			Utilization Range For Key Species
	*Up	*Static	*Down	
Mine Valley	0	1	1	3 to 52%
Mormon Well	1	2	0	13 to 18%
Mosby-Nay	0	10	0	12 to 48%
Mt. Trumbull	3	3	1	39 to 57%
Mud & Cane	1	4	0	24 to 59%
Mule Canyon	1	1	1	22 to 50%
Mustang Spring	1	3	0	40 to 54%
Pakoon	2	1	0	7 to 23%
Pakoon Spring	0	3	0	19 to 70%
Parashant	6	4	0	13 to 44%
Pa's Pocket	4	1	0	39 to 49%
Penn's Well	0	4	0	18 to 21%
Poverty	12	1	0	8 to 42%
Purgatory	0	2	0	22 to 40%
Quail Canyon	0	3	0	19 to 30%
Sullivan Canyon	0	5	2	6 to 52%
Sullivan Tank	3	1	0	10 to 19%
Sunshine	1	2	0	18 to 42%
Tassi	3	2	0	11 to 41%
Toquer Tank	2	0	1	3 to 23%
Whiterock-Soapstone	0	4	2	21 to 44%
Wildcat	1	3	1	12 to 53%
Wolfhole Canyon	3	5	0	3 to 65%
Wolfhole Lake	1	1	0	19 to 40%
TOTALS	99 (41%)	128 (53%)	15 (6%)	

VERMILLION RESOURCE AREA

Allotment	Number of Key Areas			Utilization Range For Key Species
	*Up	*Static	*Down	
Atkin Well	0	7	0	6 to 46%
Badger Creek	0	1	1	5 to 23%
Beanhole	3	0	1	22 to 35%
Brown-Shumway	0	1	1	11 to 31%
Buffalo Tank	1	2	1	10 to 64%
Button	2	1	0	5 to 39%
Canaan Gap	3	1	0	22 to 27%
Cane Beds	0	1	1	21 to 57%
Cedar Knolls	2	1	0	21 to 62%
Cedar Ridge	1	0	1	7 to 22%
Chatterly	0	1	1	24 to 40%
Clayhole	4	4	2	7 to 65%
Cottonwood	0	3	0	3 to 51%
Cowboy Butte	3	2	0	2 to 15%
Coyote	2	2	1	8 to 42%
Cram	2	3	0	24 to 30%
Crosby Tank	0	2	0	22 to 30%

APPENDIX 2 (CONTINUED)
RANGELAND TREND/UTILIZATION AS OF 1988

VERMILLION RESOURCE AREA

Allotment	Number of Key Areas			Utilization Range For Key Species
	*Up	*Static	*Down	
Fern Tank	1	2	4	30 to 72%
Flat Top-Hurricane	0	2	1	16 to 40%
Franks Reservoir	2	1	0	20 to 33%
Fuller Road	1	6	4	20 to 53%
Glazier Dam	3	0	1	5 to 24%
Grama Point	2	2	0	12 to 47%
Grama Spring	2	1	0	27 to 56%
Gulch	-	-	-	--%
Gunsight	0	2	0	14 to 36%
Hacks	2	0	0	23 to 43%
Hacks Canyon	-	-	-	--%
Highway	0	1	0	29 to 70%
House Rock	2	3	0	--%
June Tank	4	4	1	11 to 39%
Kanab Creek	0	2	0	8 to 39%
Kanab Gulch	1	0	1	9 to 34%
Lamb Tank	1	5	0	9 to 38%
Lee's Ferry	1	0	0	14 to 57%
Moonshine	5	7	0	14 to 57%
Mt. Logan	1	2	2	5 to 47%
Muggins Flat	0	3	0	10 to 58%
Pigeon Tank	0	6	0	16 to 58%
Pratt Tank	0	5	0	13 to 50%
Rider	0	1	0	39 to 53%
Rock Canyon Tank	1	0	2	10 to 53%
Rock Pockets	3	0	0	18 to 86%
Scotties Seep	0	2	1	21 to 31%
Shinarump	2	1	0	18 to 32%
Shuttleworth	-	-	-	5 to 44%
Signature Rock	5	2	1	4 to 78%
Soap Creek	3	2	1	3 to 56%
Sunshine Tank	1	2	0	36 to 46%
Swapp Tank	1	2	1	13 to 47%
Temple Trail	1	3	1	31 to 46%
Tuweep	1	3	2	26 to 41%
Two Mile	7	1	0	15 to 70%
Valley Wash	0	1	0	40 to 47%
Vermillion	7	11	0	16 to 66%
Wells	2	1	0	33 to 53%
White Sage	2	6	0	27 to 81%
Wildband	1	2	2	19 5o 68%
TOTALS	88 (35%)	126 (50%)	35 (15%)	

Utilization: Range of average pasture utilization, 1986-1988.
Key Species Trend: *Up - 10% and more above point of origin
*Static - within 10% of point of origin
*Down - 10% and more below point of origin
Key Species: Forage species whose use serves as an indicator of the degree of use of associated species.
Key Area: Small portion of rangeland monitored to assess the effects of grazing management .
A dash appears where data is unavailable

APPENDIX 3
ALLOTMENT CATEGORIZATION CRITERIA

Maintain (M)

(a) Present range condition is satisfactory.

(b) Allotments have high or moderate resource potential and are producing near their potential (or trend is moving in that direction.)

(c) No serious resource-use conflicts/controversy exist.

(d) Opportunities may exist for positive economic return from public investments.

(e) Present management is satisfactory.

(f) Other criteria appropriate to the ES area.

Improve (I)

(a) Present range condition is unsatisfactory.

(b) Allotments have high to moderate resource production potential and are producing at low to moderate levels.

(c) Serious resource-use conflicts/controversy exists.

(d) Opportunities exist for positive economic return from public investments.

(e) Present management appears unsatisfactory.

(f) Other criteria appropriate to the ES area.

Custodial (C)

(a) Present range condition is not a paramount factor.

(b) Allotments have low resource production potential, and are producing near their potential.

(c) Limited resource-use conflicts/controversy may exist.

(d) Opportunities for positive economic return on public investment do not exist or are constrained by technological or economic factors.

(e) Present management appears satisfactory or is the only logical practice under existing resource conditions or land ownership pattern.

(f) Other criteria appropriate to the ES area.

APPENDIX 4
RESOURCE MONITORING AND EVALUATION PLAN

Element	Item	Location	Technique	Unit of Measure	Frequency and Duration	Information Warranting Decision Change
MINERALS	Discovery of mineral resources	Districtwide	Published geologic information and industry contacts	Significant mineral resource	Continuous	The discovery of a significant locatable or leasable mineral deposit or public demand for a salable mineral resource in areas where restrictions to such uses apply would warrant consideration of a plan amendment to encourage rather than restrict mineral resource development in those areas.
CULTURAL RESOURCES	Site vandalism (including OHV damage)	The seven areas of cultural significance (ACECs)	Site inspection (air and ground photo documentation	Number of sites disturbed	Twice a year/site	Trends indicating increased disturbance.
WATERSHED	Soil loss	Upper Langs Run/ Fort Pierce Wash	Pair runoff plot	Tons/acre/year	Annually	Activity plans
		All proposed watershed activity plans	Erosion equations and models	Tons/acre/year	Initial; follow up every 5 years	Activity plans
		Saline soils		Tons/acre/year	Initial; follow up every 5 years	Activity plans
	Salt loading	Into Colorado River		Tons/year	Initial; follow up every 5 years	Colorado River Salinity Act
WATER	Quality	Riparian areas listed	Field and/or lab analyses	Biological, chemical, and physical properties	Initial for baseline information, then annually	Riparian management program
		Selected acquifers	Field and/or lab analyses	Biological, chemical, and physical properties properties	Initial for baseline information	Riparian management program plus watershed program data needs
RANGELAND VEGETATION	Condition	530+ key areas	Species composition by dry weight rank	Ecological condition	Once in 10 years	Trend away from desired plant community
	Trend	530+ key areas	Pace frequency	Change in percentage frequency	End of grazing cycle and allotment categorization requirements	Two grazing cycles of down trend (-20% change)
	Utilization	530+ key areas	Grazed class on selected key species	Percent forage removed	End of each grazing period	Utilization greater than 50% over a 3-year period

APPENDIX 4
RESOURCE MONITORING AND EVALUATION PLAN

Element	Item	Location	Technique	Unit of Measure	Frequency and Duration	Information Warranting Decision Change
SPECIAL STATUS PLANTS	Population stability	Marble Canyon, Lost Spring Mtn., Moonshine Ridge, Johnson Spring, & Fort Pierce ACECs	Field survey	Occurrence, number, age class, distribution	Annually	5-year downward trend in population numbers, age/class, disparity, shrinking distribution
	Habitat evaluation and protection	Marble Canyon, Lost Spring Mtn., Moonshine Ridge, Johnson Spring, & Fort Pierce ACECs	Site inspection of habitat	Acres of surface disturbance and number of plants destroyed	Three times a year	Evidence of unauthorized activity
BURROS	Population	Tassi herd area	Helicopter mark recount	Count	Every three years	Population change outside of HMAP parameters
	Range condition	Tassi herd area	Rangeland Vegetation	See Rangeland Vegetation	Every three years	Condition is reduced
	Sex ratio	Tassi herd area	Ground observation	Count	Every three years	20% change from normal
	Forage utilization	Tassi herd area	Key forage method grazed class	Percent removed	Annually	More than 50% utilization
	Protection	Tassi herd area	Road patrol, public reports	N/A	Annually	Signs of harrassment
WILDLIFE HABITAT Desert Bighorn Sheep	Population estimates	Four sheep habitat areas	AGFD survey	Number	Annually	Reestablishment goals and total allowable numbers
	Project use and value	Four sheep habitat areas	Field check	Each project	Annually	Reestablishment goals and total allowable numbers
	Habitat potential	Four sheep habitat areas	Rangeland vegetation	Count	Each 5 years	Reestablishment goals and total allowable numbers
	Fecal analysis	Four sheep habitat areas	Random sample	Samples	Each 5 years	Reestablishment goals and total allowable numbers
Mule Deer	Population estimates	Districtwide	AGFD	Number	Annually	Significant population decrease
	Habitat quality	Districtwide	Field survey	Acres	5-year intervals	Significant population decrease
	Project use, value, & condition	Districtwide	Field survey	Number	Annually	Significant population decrease
	Fecal analysis	Districtwide	Random sample	Samples	Each 5 years	Significant population decrease

APPENDIX 4
RESOURCE MONITORING AND EVALUATION PLAN

Element	Item	Location	Technique	Unit of Measure	Frequency and Duration	Information Warranting Decision Change
Pronghorn Antelope	Population estimates	Three habitat areas	AGFD survey	Number	Annually	Management goals and carrying capacity
	Habitat quality	Three habitat areas	Field survey	Acres	5-year intervals	Management goals and carrying capacity
	Project use, value, & condition	Three habitat areas	Field survey	Number	Annually	Management goals and carrying capacity
	Fecal analysis	Three habitat areas	Random sample	Samples	Annually	Management goals and carrying capacity
SPECIAL STATUS ANIMALS Desert Tortoise	Relative densities	Beaver Dam ACEC, Pakoon, Virgin Slopes	Direct count and transects	Number	Annually	Significant population decrease
	Land use activities and impacts	Beaver Dam ACEC, Pakoon, Virgin Slopes	Direct count and transects	Number	Annually	Significant population decrease
Peregrine Falcon	Relative densities	Districtwide	Field survey and study	Number	Annually	Management goals and field surveys
	Land use activities and impacts	Districtwide	Field survey and study	Number	Annually	Management goals and field surveys
Woundfin Minnow	Stream surveys	Virgin River ACEC	Direct counts	Number	Annually	Significant population decrease
RECREATION	ERMAS	Areawide, focus on higher use areas, especially in area B	Patrol, area inspection for changes to physical setting, traffic counters, estimates,	Visitor days % change in ROS classes toward urban	Check counters monthly Annually in area A,	Data indicates significant change to social settings. Data indicates <5% annual shift in ROS classes <1% in area B
	RCAs, SRMA	Parashant, Mt. Trumbull, Canyons and Plateaus of the Paria	Patrol, area inspection for changes to physical setting, traffic counters, estimates, registers, RAMP and CRMPs	Visitor days % change in ROS classes toward Urban	Check counters monthly Annually	Data indicates significant change to social settings. Data indicates <1% annual shift in ROS classes
	Wild & Scenic Rivers	Paria River, Virgin River	Measure of flow, changes to physical settings, required consideration in all EAs for projects proposed in corridors, river patrols	Flow rate Affect on river classification Resource damage	Monthly Annually Annually	More than 3 months below minimum, mean, human caused change in outstanding values

APPENDIX 4
RESOURCE MONITORING AND EVALUATION PLAN

Element	Item	Location	Technique	Unit of Measure	Frequency and Duration	Information Warranting Decision Change
RECREATION (cont.)	OHV Management	Areawide, focus on closed, LDRT, open areas	Aerial reconnaissance, ground patrol	Visitor days, Violations	Two flights/year during high use; ground patrols monthly by patrol area or as needed	Three violations per season on any given patrol area
	Facilities	Virgin River CG, Dominguez-Escalante Site	Patrol, registers	Visitor days, structural damage	Monthly	In VRCG, data indicates sustained use that requires additional or improved facilities. Increased vandalism
RIPARIAN AREAS	Condition	Nineteen (19) locations in Table III-14	Macroinvertebrate analysis Plant methodology being developed	Species and their quantity Miles/acres	Annually Once per 5-year period	5 years of downtrend Drop of one condition class

APPENDIX 5
RECLAMATION STIPULATIONS

Appendix 5 is a list of general requirements for preserving and protecting the special environmental and unique resource values of the Arizona Strip. These requirements will guide the formulation of specific stipulations, construction and/or operating standards which will be applied to surface-disturbing activity. They are designed to provide public land users with a clear understanding of what constitutes prevention of unnecessary or undue degradation and what is required for reclamation. These requirements are supported by FLPMA and other environmental laws. Suitable site-specific stipulations regarding construction and reclamation and the prevention of unnecessary or undue degradation will be developed by the authorized officer and applied to each authorization in order to minimize long-term impacts and ensure that sites are effectively reclaimed.

UNNECESSARY OR UNDUE DEGRADATION

1. All surface disturbance, including road construction and associated travel, shall be kept to the minimum necessary to accomplish the task. Road upgrade and realignment requests shall include plans for reclamation and a proposal for a post-operations final alignment.

2. All new temporary or existing upgraded roads may require mitigation to reduce the potential adverse impact of fugitive dust as specified by the authorized officer.

3. Where soil characteristics warrant, topsoil shall be stockpiled from a surface depth specified by the authorized officer.

4. All surface-disturbing activities on slopes greater than 15 percent shall include measures to stabilize soils and control surface water runoff.

5. During construction and operation of facilities or improvements, care shall be taken to minimize, to the extent practicable, impacts to the natural and human environments. This may be accomplished through the painting or screening of structures and facilities to blend with the surrounding environment; the suppression of dust and noise; the proper disposal of waste products; and provisions to safeguard public safety.

6. Coloration products may be required along travel corridors and in VRM Class II areas to reduce color contrast and restore the natural color balance.

7. Construction and reclamation activities shall be designed to minimize long-term impacts to natural lines, form, textures and color contrast. Reclamation methods shall avoid disturbing more area or exposing greater color contrast than resulted from the original operation.

8. All facilities or improvements that are no longer needed must be removed.

9. In order to protect the wildlife, the public or other important values and discourage unnecessary public contact with authorized activities, the authorized officer may require improvements or facilities to be fenced, gated and locked.

10. Mineral material disposal in VRM Class II areas shall not be allowed if reasonable alternative sources are available in other VRM classes. Any mineral material disposal sites authorized in VRM Class II shall not compromise the VRM class objectives.

11. All powerlines shall be constructed to minimize visual impacts. This may include burying them along existing roads in VRM Class II, ACECs or RCAs.

12. Applicants shall supply, at the discretion of the authorized officer, pertinent information regarding impacts from the proposal on surface and groundwater quality and quantity and anticipated impacts from 100-year, 24-hour storm events.

APPENDIX 5
RECLAMATION STIPULATIONS

13. All forms of residential occupancy are discouraged on public lands within the Arizona Strip District. Exceptions may occur for the protection of public health and safety, the protection of private property. With regard to locatable mineral development, occupants must be actively and diligently engaged in substantially continuous operations. Intermittent, part time, seasonal or recreational mining operations do not meet district occupancy standards. All plans for residential occupancy must be fully incorporated into submitted notices and plans. All proposals for residential occupancy shall be subject to the requirement to prevent unnecessary or undue degradation and shall comply with all applicable state and federal laws, regulations and permits. Residential occupancy not in conformance with applicable laws, Bureau guidelines and district policy will be subject to immediate trespass action by the Bureau.

14. Applicants may be required by the authorized officer to provide inventories for threatened or endangered plants and/or animals and cultural resources. All inventories shall be performed to Bureau standards.

15. No surface disturbance shall be authorized which would impact any cultural sites prior to consultation with the State Historic Preservation Officer (SHPO) and threatened or endanagered species prior to compliance with the Endangered Species Act.

16. No surface disturbance will be authorized which would impact any cultural property that is allocated to Conservation Use in an approved Cultural Resource Management Plan.

RECLAMATION

1. Reclamation of all surface disturbances must be initiated immediately upon completion of activities, unless otherwise approved by the authorized officer. Reclamation of disturbed areas shall, to the extent practicable, include contouring disturbances to blend with the surrounding terrain, replacement of topsoil, smoothing and blending the original surface colors to minimize impacts to visual resources, and seed the disturbed areas with a mix specified by the authorized officer.

2. All chemicals, trash, garbage or other foreign material must be removed completely from the project area by the applicant immediately upon completion of the project. All material must be properly disposed of in an approved disposal facility. Exceptions to this limitation shall be approved by the authorized officer.

3. At no time shall vehicle or equipment fluids be dumped on public lands. All accidental spills must be reported to BLM and be cleaned up immediately, using best available practices and requirements of the law. All spills of federally or state listed hazardous materials which exceed the reportable quantities shall be promptly reported to the appropriate state agency and the Arizona Strip District.

4. Disturbed areas, where soil and rainfall are adequate for anticipated success, shall be revegetated. In all VRM Class II areas, ACECs and RCAs revegetation of native species shall be preferred. Rates and seed mixes shall be determined by the authorized officer.

5. Revegetation efforts must establish a stable biological groundcover equal to or exceeding that which occurred prior to disturbance. Mulching may be appropriate for conserving moisture and holding seed on-site thus improving the chances for successful establishment.

6. All unnecessary roads shall be reclaimed and closed immediately upon termination of the project. Recontouring all cut slopes to approximately the original contour shall be required. Reclaimed roads shall be barricaded or signed to protect them until reclamation is achieved. All existing roads that require upgrading shall be reclaimed to their original dimensions upon completion of the project. Exceptions must be approved in writing by the authorized officer.

APPENDIX 6
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Mt. Trumbull/Mt. Logan	This area contains archaeological, historic, scenic and geologic resource values.	Many of the archaeological site types and features known to occur in the geographic region are represented in this area: pithouses, surface masonry features, habitation structures, hearths, lithic scatters, open campsites, rock art, rock shelters and trails. Sites representing human occupancy from the Archaic (2600 B.C.) to historic time periods are found within this area. Research potential exists to answer regional archaeological questions regarding settlement trade and cultural development not addressed by other areas on the Arizona Strip. Scientific interest in these sites have been expressed by various universities and organizations including Northern Arizona University, Museum of Northern Arizona, Southern Utah State College, and Brigham Young University. In 1872 sawmills were set up on Mt. Trumbull to provide lumber for construction of the Mormon Temple in St. George. Nixon Spring is the site of one of these sawmills. The outstanding geologic feature within the area is the Uinkaret Volcanic Field, an area of 144 square miles of cinder cones, basalt capped mesas, ice caves and rugged lava flows.	Immediate and potential threats to these resource values include OHV use, woodcutting and cultural site vandalism.	<u>Ineligible</u> 1. This area is considered ineligible for ACEC designation because its cultural and scenic values are not significantly greater than many other areas over the Arizona Strip. Other special management designations are more appropriate. 2. Many of the special resource values of this area are contained within the Mt. Trumbull and Mt. Logan wilderness areas. This gives them an adequate level of protection. The special resource values outside wilderness will be monitored to determine adequacy of present management in preservation of these values. Monitoring will determine whether more protective management direction is warranted.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Little Black Mountain	This is a significant cultural site containing some 500 figures. This site exhibits petroglyphs from five separate cultures.	The site may offer answers to important research questions concerning trade routes and cultural migration through the area.	Due to the close proximity of the site to St. George, it is vulnerable to vandalism from the uninformed visitor. The area is also currently open to OHV use which could result in degradation of the integrity of the site for interpretive purposes.	Eligible 1. This is a regionally significant petroglyph site containing evidence of several cultures. 2. The site is ideally located to be developed as an interpretive site for the public. 3. The integrity of the site is threatened by vandalism from the uninformed visitor and OHV use.
Nampaweap	This is a significant cultural site consisting of numerous petroglyphs and pictographs located along a canyon rim. Habitation sites also occur on nearby benches.	This site contains evidence of the period of contact between early explorers and Indian cultures. Both historic and prehistoric cultures are represented.	The integrity of the site needs to be protected for public use and interpretation. Potential threats to the site include those associated with range improvements and other competing land uses. These land uses could adversely impact the integrity of the sites.	Eligible 1. This is a significant cultural site containing extensive petroglyphs and pictographs. 2. The integrity of the site for public interpretation is dependent upon the immediately surrounding area. 3. The integrity of the site is threatened by conflicting land uses.
Fort Pierce	The Fort Pierce area is a large watershed subject to flooding and severe erosion. Soils in the area are highly saline and contribute to the salinity of the Colorado River. It also has a dense population of Siler pincushion cactus (*Pediocactus sileri*), a federally listed endangered species.	This area has a dense concentration of *P. sileri*, listed as endangered cactus; there are 760 acres of severe erosion, 22,800 acres of critical erosion and 14,600 acres of moderate erosion. Within this area 23,758 acres are of fragile soils/cryptogamic communities.	The area has grazing privileges throughout and two small gypsum mining operations. Utah BLM has a proposed ACEC adjacent to this area in the Dixie Resource Area for the protection of two endangered plants and the Gila monster.	Eligible 1. The area contributes salinity to the Colorado River. 2. The area contains the endangered plant Siler pincushion cactus. 3. Designation would provide for the coordinated management of this sensitive area across state lines.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Marble Canyon	Marble Canyon has a population of Brady pincushion cactus (*Pediocactus bradyi*), a federally listed endangered plant species.	The presence of a listed endangered and Category I plant are biological resources of more than local significance. With the exception of one population known in the Glen Canyon National Recreation Area, the population of *Pediocactus bradyi* within the proposed ACEC is the only other population known on public lands. *Pediocactus peeblesianus* var. *fickeiseniae*, although more widely distributed than *P. bradyi*, occurs as small localized populations, none of which currently occur within a protected area. The proposed ACEC is the only area where the two species overlap. Two state sensitive plants, the Atwood crypthantha and indigo bush, provide additional importance to the area.	This area borders the Marble Canyon of the Grand Canyon National Park. Potential threats include mineral resource exploration and development and livestock grazing. The area is also open to OHV activity. Data in 1987-1988 from four plots show five tagged plants of *P. bradyi* were killed by OHV activity. Another small number were run over but not mortally injured.The Arizona Plant Recovery Team, the Arizona Nature Conservancy, and the U.S. Fish and Wildlife Service have nominated this ACEC due to the above qualities.	Eligible 1. Federally listed Brady pincushion cactus is endangered. Fickeisen pincushion cactus is proposed for listing. In addition, two state sensitive plants occur in the area. 2. OHV activity associated with recreation use and mineral resources exploration threatens the sensitive resources. 3. The Arizona Nature Conservancy, U.S. Fish and Wildlife Service, and Arizona Plant Recovery Team nominated this site.
Turbinella-Gambel Oak Research Natural Area	Established as a 154-acre research natural area in 1965 by Public Land Order (PLO) 3701 due to presence of a hybrid cross between Turbinella and Gambel oak.	Since discovery, there has been no interest in studying the site.	It has been recommended that the PLO order be revoked because the original purpose for the withdrawal is no longer valid.	Ineligible 1. This area is considered ineligible for ACEC designation because of lack of significant values and important resources. 2. Part of the area has been included in the Paiute Wilderness designation in 1984.
Vermillion Cliffs Outstanding Natural Area	The Vermillion Cliffs Natural Area was established in 1969 for protection of the outstanding scenic values of the Vermillion Cliffs.	The Vermillion Cliffs are more than locally significant as they are designated wilderness in 1984.	The relevant and important portion of the Vermillion Cliffs Natural Area was included in the Paria Canyon-Vermillion Cliffs Wilderness in 1984. In the House Report that accompanied the House of Representatives Bill (H.R. 4707), the committee intended that the portion of the Vermillion Cliffs Natural Area not designated as wilderness continue to be administered by BLM as a natural area.	Ineligible 1. The portion of the Vermillion Cliffs Natural Area not designated as wilderness does not meet the relevance and importance criteria in 43 CFR 1610.7-2. 2. The areas qualifying as an ACEC have already been designated as wilderness.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Lost Spring Mountain	This area contains a federally listed endangered plant species (*Pediocactus sileri*). It also contains significant archaeological resource values which are sensitive and vulnerable to adverse change.	*Pediocactus sileri*, a federally and state listed endangered species, occurs here in dense populations. This species is endemic to the Arizona Strip and 4,000 plants are known to occupy the area. Lost Spring Mountain has archaeological site types that represent a broad range of human occupancy and activity including pithouses, grinding camps, rock shelters, petroglyphs, pictographs and pueblos. It is the center mesa in a physiographic unit created by Little Creek Mountain in Utah to the northwest and Yellowstone Mesa to the southeast. The cultural resources of this area have the potential for answering questions of cultural development not only on these three mesas, but also in the Virgin River drainage. Information concerning the interaction with cultural groups in the region may also be gathered here.	Immediate and potential threats to the special resource values of this area include OHV activity, mineral exploration,livestock trampling, collecting, and vandalism. The *Pediocactus sileri* site was nominated by the Arizona Nature Conservancy, U.S. Fish and Wildlife Service, and the Arizona Plant Recovery Team. Little Creek Mountain, the adjacent area in Utah, is a proposed cultural ACEC.	<u>Eligible</u> 1. The area contains a federally listed endangered plant species requiring special management attention. 2. The area contains regionally significant irreplaceable cultural resource values. 3. Designation would provide for the coordinated management of this sensitive area across state lines.
Witch Pool	This site contains numerous pictographs, petroglyphs, and habitation sites which are regionally and nationally significant from both a prehistoric and historic perspective.	Witch Pool is a permanent water source which was used by Anasazi and Paiute cultures. This site contains walled structures, grinding sites, petroglyphs, pictographs and a Christian cross connected through local legend to the Escalante expedition of 1776. The site was visited by John Wesley Powell and contains a pictograph of a one armed man on a horse. A lithograph of the canyon site was made by the Powell expedition. An important water source on private land trails through the region.	The area is subject to potential harm by the uninformed visitor. Pictograph of one-armed man on a horse exposed and faded warrants protection. The integrity of the area in the immediate vicinity of Witch Pool is important to public interpretation of the site.	<u>Eligible</u> 1. The site has significant historic and prehistoric cultural resource values. 2. The site is documented in Major Powell's journal. 3. The site is regionally and nationally significant. 4. The site will be placed in the public use category allowing interpretation of the cultural resource values.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Johnson Spring	This area contains a federally listed endangered plant species (*Pediocactus sileri*). It also contains significant archaeological resource values which are sensitive and vulnerable to adverse change.	Johnson Spring has a dense population of Siler pincushion cactus which is endemic to the Arizona Strip. In addition to its federal listing, the cactus is on the state sensitive list. This area has a known population of 188 plants.The Shinarump Cliffs in the Johnson Spring area has a wide range of archaeological site types with high frequency of early Anasazi sites. Critical research questions concerning the transition from different stages of cultural development may be answered by the high density of Basketmaker sites and Pueblo sites that represent continuous occupancy during the transition.	Immediate and potential threats to the special resource values of this area include OHV activity, mineral resource exploration, livestock trampling, collecting, and vandalism.The *Pediocactus sileri* site was nominated by the Arizona Nature Conservancy, U.S. Fish and Wildlife Service, and the Arizona Plant Recovery Team.	Eligible 1. The ACEC contains a federally listed endangered plant species requiring special management attention. 2. The area contains regionally significant and irreplaceable cultural resource values. 3. Threats to the resources of the area can be adequately controlled through ACEC designation.
Andrus/Dansil Canyons	The canyon rims provide scenic overlooks into Lake Mead National Recreation Area.	Maintaining the naturalness and remote character of the area is a desirable management objective.	The area has a high potential for the occurrence of locatable mineral resources contained in breccia pipes. Mineral exploration and development activities pose some threat to the natural appearance of the area.	Ineligible 1. Scenic resource values are not more than locally significant. 2. The canyons do not possess scenery unique in the Grand Canyon region. 3. The natural appearance of the area can be adequately protected via other management tools.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Parashant Canyon	This canyon contains scenic values similar to those contained within the upper portions of canyons in Lake Mead National Recreation Area and Grand Canyon National Park.	The BLM-managed portion of this canyon is relatively accessible and provides primitive recreational opportunities. Maintaining the naturalness and remote character of the area is a desirable management objective.	The area has a high potential for the occurrence of locatable mineral resources contained in breccia pipes. Mineral exploration and development activities pose some threat to the natural appearance of the area.	Ineligible 1. The scenic resource values in the BLM-managed portion of the canyon are not particularly interesting and are not more than locally significant. 2. The upper portions of Parashant Canyon do not have scenery unique to the Grand Canyon region. 3. The natural appearance of the area can be adequately protected via other management tools.
Virgin River Corridor	The Virgin River and associated riparian areas provide habitat for two federally listed fish, a group 2 state listed vertebrate, and a restricted endemic plant. The portion of the corridor which pushes through the Virgin/Beaver Dam Mountains contains unique scenic values. This portion also contains I-15 which carries many thousands of people through the scenic area each day.	The Virgin River Corridor is unique in that it provides habitat for many wildlife, fish and plant species, including several special status species. The federally listed fish species include the woundfin minnow (endangered) and the Virgin River roundtail chub (proposed for listing, category I). The state listed threatened) vertebrate is the Virgin River spinedace. A rare thistle, *Cirisum virginensis*, has been found at one of the saline springs within the corridor. This plant is currently under study by the U.S. Fish and Wildlife Service for special status listing.The Virgin River Gorge reveals spectacular scenic beauty and takes the traveler through a 500 million year geologic era. Interstate 15 winds through the 11 miles of the gorge. The gorge has sections which are only 150 feet wide with vertical rock walls extending 300 to 500 feet high and lying between mountain peaks extending over 2,000 feet.	Riparian habitat modification, both immediate and potential, comprises the major threat that demands special management attention. Specific threats include stream dewatering, water diversion, channelization, road construction, urban growth and intensive recreation use. That portion of the Virgin River Corridor within the Virgin River Gorge is currently protected by a scenic withdrawal which segregates the area from entry under the agricultural and mining laws.	Eligible 1. The riparian area is unique in that it provides habitat for several special status plant and animal species. 2. The Virgin River Gorge has national significance due to the outstanding scenic resource values which are viewed by a great number of travelers each day. 3. The unique resource values at risk lend themselves to protection under ACEC guidelines.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Beaver Dam	This area provides Category I habitat for the desert tortoise, a federally listed threatened species.	The area is important to the maintenance of viable tortoise populations on the Beaver Dam Slope. Current trends in tortoise populations in the area are static to downward. The fragile nature of this desert environment makes it vulnerable to surface-disturbing activities.The Desert Tortoise Council and Defenders of Wildlife have expressed interest in this area and its management.	The Beaver Dam Slope has a moderate potential for the occurrence of locatable minerals. Mineral exploration and development could possibly increase in this area. Livestock grazing occurs in the area. Grazing and range improvement projects must be compatible with tortoise recovery. An ACEC and natural area have both been proposed for adjacent lands in Utah by the Dixie Resource Area, BLM. OHV and community expansion impacts are expected to increase throughout the general area.	Eligible 1. The area contains a population of tortoise which is regionally important to the recovery of tortoise populations. The area is susceptible to impacts from urban encroachment and other competing resource uses. 2. Designation of the area as an ACEC would provide the focused management necessary to protect the desert tortoise population from the potential threats.
Whitmore Canyon	This canyon contains scenic values similar to canyons within Lake Mead National Recreation Area and Grand Canyon National Park.	Whitmore Canyon provides the only road access to the Colorado River in this portion of Grand Canyon National Park. River runners from many countries enter and exit the river via this canyon. The significant resource qualities of this area relate to its scenic and recreational resources.	Existing uses in the canyon include livestock grazing and a commercial river running enterprise. Existing disturbances include a lodge and the Whitmore airport. The area has a high potential for the occurrence of locatable mineral resources contained in breccia pipes. Mineral exploration and development activities pose some threat to the natural appearance of the area.	Ineligible 1. Although this area serves as an access route to the Colorado River for river runners, it does not have national or regional significance. 2. Mineral exploration and development do not pose a significant threat to scenic values. 3. The scenic quality of the area can be protected via other management tools.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Parashant	This area is distinguished by its unique ponderosa pine community occurring outside its normal range.	The uniqueness of this area lies in the extensive stringers of ponderosa pine that grow along the drainages at elevations between 5,900 and 6,200 feet. This is well below the recognized minimum elevation of 6,500 feet for ponderosa habitat. The area borders on and provides access to Mount Dellenbaugh and several remote canyons in Lake Mead National Recreation Area and the Grand Canyon National Park. Its mixture of ponderosa and pinyon/juniper woodland provides habitat for mule deer, small game, raptors and other non-game species. A joint effort between BLM and AGFD is under way to introduce wild turkeys and Kaibab squirrels into the area. Its remote location offers opportunities for primitive and semi-primitive recreation activities including backcountry exploring by vehicle, hiking, backpacking, camping, picnicking, and wildlife observation.		Ineligible 1. Area has few if any threats. 2. Values are not endangered or rare. The vegetation, scenery, remoteness, and naturalness are not unique nationally or regionally. 3. Another type of special management designation is more appropriate for this area to protect the resource values and enhance the recreational use of the area.
Kanab Creek Tributaries	This area contains a variety of unusual and interesting geologic formations and features, giving it scenic qualities similar to those found in Lake Mead National Recreation Area and Grand Canyon.	The Kanab Creek Tributaries are characterized by incised canyons, domes, fins, aprons, pinnacles, and cliffs sculpted in colored limestones, mudstones and sandstones by a combination of wind and water erosion. Possible archaeological site types and features in the area include habitation structures, lithic scatters, rock art and rock shelters. Rock art in the lower Kanab drainage tends to be in the format of pictographs.	This area has a high potential for the occurrence of mineral resources contained in breccia pipes. Mineral exploration and development pose some threat to the natural appearance of the area.	Ineligible 1. The scenery, remoteness and naturalness of this canyon which has not been designated as wilderness is not unique in the region. 2. The canyon is relatively inaccessible and significant impacts to the natural appearance of the canyon from mineral resource exploration and development are not expected. 3. Other management practices are better suited to this area for the protection of the natural setting and cultural resource values.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Red Rock and Middle Springs	These two sites consist of small riparian plant communities surrounding spring sources.	Riparian sites provide a great diversity of wildlife habitat, especially in the arid Southwest. Most riparian vegetation consists of grapevine, planted cottonwoods, cattails, and rushes.	These springs and their riparian areas have fenced exclosures with gates. The immediate threat is the gates on the exclosures could be left open occasionally and cattle reoccupy the riparian areas.	Ineligible 1. The springs are already protected by fences. 2. The springs are not of national or regional significance. 3. No sensitive plant or animal species or irreplaceable values are threatened. 4. The riparian areas are improving through current management practices.
Hazardous Mine Areas	Three abandoned mines and one natural sinkhole present a public safety hazard due to open shafts and an open pit.	The mines are abandoned with old buildings and open mine shafts. They create an attractive nuisance and public safety hazard. The sinkhole is a natural phenomena which poses some threats to livestock and the public.	The abandoned mines include: Savanic - T33N R14W S9 SW1/4 Sun Valley - T38N R6E S6 SW1/4 Unnamed - T40N R15W S14 SW1/4 The Unnamed and Sun Valley mines lie within wilderness areas. Mining claims currently cover the Savanic and Sun Valley mines. The Beaver Dam Sinkhole is located in T41N R15W S12 NW1/4.	Ineligible 1. Due to remoteness, these areas are not considered to be a significant present or potential threat to public safety. 2. Hazards of this type can be adequately managed via other management techniques. 3. The State of Arizona has been notified of these hazards for inclusion in their mine hazard reduction program
Cottonwood Spring	This site consists of an oasis of lush riparian habitat around a spring and small stream.	This spring has 4 acres of riparian area which is vital to wildlife and livestock in an arid area. The riparian area has cottonwoods, ash, willow, slickrock and sand with pools of water and aquatic vegetation. Migratory birds, deer, and other wildlife utilize this resource.	The livestock permittees have water rights to the spring. Cottonwood Spring is located within the Cottonwood Point Wilderness which provides more than adequate protection to riparian resource values.	Ineligible 1. The area has no national or regional significance. 2. The riparian area does not support endangered or threatened plant or animal species.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Grand Wash (Buckhorn, Grapevine, Whiskey, and Little Arizona Springs)	These four sites consist of small riparian plant communities surrounding spring sources.	Buckhorn, Whiskey, Grapevine, and Little Arizona Springs are located in an area of little live water. The riparian vegetation in these springs include cottonwoods, willows, arrowweed, mesquite, cattails, rushes, etc. This habitat is vital to various wildlife species and livestock in the area.	Livestockmen hold rights to use of the water. Cattle and wild burros periodically gain access to the fenced riparian areas through opened gates, threatening the riparian areas.	Ineligible 1. The springs are insignificant from regional and national perspectives. 2. There are no endangered or sensitive species which are dependent upon the riparian areas around the springs. 3. The areas are fenced and protected. 4. The riparian areas are improving through current management practices.
Moonshine Ridge	This area contains a federally-listed endangered plant species (*Pediocactus sileri*). It also contains significant archaeological resource values which are sensitive and vulnerable to adverse change.	Moonshine Ridge has a known population of 3,000 plants of Siler pincushion cactus (*Pediocactus sileri*). The cactus is endemic to the Arizona Strip and is listed as sensitive to extinction by the state in addition to its endangered federal listing. Moonshine Ridge has cultural resources that represent a continuous use of the area. Sites that represent the permanent settlements of large populations and possible agricultural developments in nearby valleys could answer important regional questions regarding this activity as well as population densities.	The entire area has authorized livestock grazing. The area has a high potential for the occurrence of locatable mineral resources contained in both breccia pipes and sandstone bodies. Off-highway vehicle use is presently allowed here. The *Pediocactus sileri* site was nominated by the Arizona Nature Conservancy, U.S. Fish and Wildlife Service, and the Arizona Plant Recovery Team.	Eligible 1. The area contains a federally-listed endangered plant species requiring special management attention. 2. Regionally significant irreplaceable cultural resource values are present which could provide answers to important resource questions. 3. These resource values, due to their known occurrence in this particular area, lend themselves to focused management which ACEC designation would provide.
Hidden Canyon	Special resource values of this area are the scenic and recreational opportunities.	Excellent opportunities for motorized and non-motorized activities such as geologic and general sightseeing, hiking, and photography are provided by the 1,800 foot cliffs of Hidden Canyon and the variety of desert vegetation and rock formations.	The area has a high potential for the occurrence of locatable mineral resources contained in breccia pipes. Mineral resource exploration and development pose some threat to the natural appearance of the area.	Ineligible 1. Threats to the natural appearance and topography of the area are low.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Hidden Canyon (cont.)		This portion of the Grand Wash Cliffs canyon country exhibits a rugged and irregular topography along the slopes at the base of the canyon walls. This combination of dramatic vertical relief, irregular cliff lines, rocky terrain and variety of vegetation are the outstanding features in this area.	The area is also currently heavily used by livestock. Heavy grazing in the canyon could adversely effect the vegetation.	2. The scenery, remoteness, and naturalness within the canyon are not regionally or nationally unique, rare or endangered. 3. The natural appearance of the area can be adequately protected via other management tools.
Southern Grand Wash Cliffs	Contains natural, scenic and historic values. The area contains a few primitive four wheel drive roads and many outstanding opportunities for recreation and solitude.	The congressional subcommittee reports on the Arizona Wilderness Act of 1984, included the following :"H.R. 4707 designates only the northern portions of the Grand Wash Cliffs as wilderness. South of the proposed wilderness the cliffs extend for another 15-20 miles until they intersect the Lake Mead National Recreation Area. The same types of wilderness values exist in the southern reaches of the cliffs as in the portion being designated as wilderness. However, the committee has not included these lands in wilderness in recognition of their significant mineral potential (especially uranium). In leaving these lands open for mineral exploration and potential development the committee emphasizes that this is an environmentally sensitive area that should be managed by the Bureau of Land Management to minimize adverse impacts on the current remote and wild values. The committee understands that the type of mining that will take place here is of a low impact, underground type. The committee knows the area to be pristine, containing few primitive, four wheel drive routes and many outstanding opportunities for recreation, solitude and scientific study."	The area has a high potential for the occurrence of locatable mineral resources in breccia pipes. Mineral exploration and development activities pose some threats to the natural appearance of bench between the cliffs. Historic mining related attractions exist in the Grand Gulch and Savanic mines which date from the 1870s. Livestock grazing and associated range improvements could alter the natural appearance of the bench between the cliffs.	<u>Ineligible</u> 1. Even though the area is visually sensitive, containing remote and wild values, mineral resource development techniques would be of the low impact, underground type. 2. Past mining activity is an historic attraction of the area. 3. The natural appearance of the area can be adequately protected via other management tools.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
House Rock Valley	U.S. 89A through House Rock Valley is a scenic route providing outstanding views of Vermillion and Echo Cliffs and Kaibab Plateau.	The outstanding scenic features surrounding this area are the colorful and massive Vermillion Cliffs, the jagged line of the Echo Cliffs, and the deep green Kaibab Plateau. While these features are not within House Rock Valley proper, the valley provides a centralized area from which to view and access the surrounding features and visually important foreground and middleground elements to the more scenic backgrounds. The populations of *Pediocactus bradyi* within the area are the only populations known on public lands. *Pediocactus peeblesianus* var. *fickeiseniae*, although more widely distributed than *P. bradyi*, also occurs as small localized populations. Many cultural resource sites occur in House Rock Valley. Portions of two trails of historic significance, the Honeymoon and Dominguez-Escalante, also traverse House Rock Valley.	The area has a high potential for the occurrence of locatable mineral resources contained in breccia pipes. Mineral exploration and development activities pose some threat to the natural appearance of foreground and middleground elements. Other threats include OHV use which result in visible scars and adverse impacts to special status plants, the trampling of special status plants by livestock, and cultural resource vandalism associated with public use of the area.	<u>Ineligible</u> 1. All of the outstanding scenic features viewed from House Rock Valley are located either in wilderness or on lands administered by another agency. Land use decisions made in the RMP would not affect the scenic values of these areas. 2. The special status plants are proposed to be included within the Marble Canyon ACEC. 3. Cultural resources, both historic and prehistoric, are not threatened by other resource uses or developments. 4. With the exception of the special status plant species, House Rock Valley proper does not contain resources which are regionally or nationally unique, rare or endangered.
Fredonia Saline Soil	This area consists of sparsely vegetated, erosive saline soils.	Part of this critical area, centered about six miles east of Fredonia, has been designated as frail lands by the BLM. The condition occurs where there is an abrupt change in elevation between levels of mesas, foothill slopes, and valleys. Rock exposures are numerous with occasional shale and gypsum outcrops where erosion is active. Sediment movement caused by sheet and rill erosion, valley trenching and upland gully scouring is heavy.	Agents which accelerate erosion in this area are OHV use and livestock grazing.	<u>Ineligible</u> 1. This area is not a significant source of Colorado River salinity. 2. The *Pediocactus sileri* do not occur in dense populations, being scattered over the entire area. Due to the relatively low levels of populations of these species in this area, ACEC designation is not appropriate.

APPENDIX 6 (CONTINUED)
AREA OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION

Nomination	Identification / Evaluation Criteria			Eligibility Conclusions
	Relevance	Importance	Other	
Fredonia Saline Soil (cont.)		Soils, consisting of fine sands and clay mixtures, are very susceptible to both wind and water erosion. Roads, rights-of-way and various types of construction projects contribute to the sediment load.This area also has a scattered population throughout of *Pediocactus sileri*, a federally-listed endangered species.		3. OHV use is intense near Fredonia but most occurs behind flood control dikes, where critical erosion sites and special status plant species do not occur. 4. No irreplaceable or unique resource values of a national or regional basis occur in the area.
Paria Plateau	Data obtained from a partial cultural resource inventory conducted on the Paria Plateau indicate the area contains a wealth of archaeological resources representative of the Anasazi culture.	The Paria Plateau contains virtually the entire spectrum of archaeological site types known to occur in the northern portion of the Southwest area. These include pithouses, surface masonry features, habitation structures, granaries, storage cists, hearths, lithic scatters, open campsites, rock art, rock shelters and trails. A high density of impressive structural sites have been documented on the plateau.	Cultural site vandalism by pot hunters is a threat to these sensitive resource values. New evidence of vandalism continues to be discovered in the field. Activities such as wood cutting, OHV use, mineral exploration, etc., also pose some threat through public use of the area. Interest in conducting further research on the cultural resources of the area has been expressed by the following institutions and organizations: Museum of Northern Arizona, Arizona State University, Northern Arizona University, Arizona Archaeological Council, Brigham Young University, and Southern Utah State College.	<u>Ineligible</u> 1. The cultural resource inventory covers less than 25% of the area. Although cultural resources are known on the plateau, current data about site densities and locations is insufficient to warrant ACEC designation. 2. The cultural resource values are not directly threatened by BLM programs or authorizations, but rather by public use in the area. 3. Cultural site vandalism which has occurred on the plateau would not be effectively reduced through ACEC designation. Designation for the protection of these resource values may be counter productive by increasing public awareness of the area. 4. Other designations and management practices for this area are more appropriate for the protection of the cultural resource values. Establishing an ACEC could attract visitors to the area and increase vandalism.

APPENDIX 7
PUBLIC LANDS IDENTIFIED FOR DISPOSAL BY SALE OR EXCHANGE

SALE OR EXCHANGE*

Disposal Description	Acreage	Criteria
T. 39 N., R. 16 W.,		
sec. 4, lot 2;	39.97	1
sec. 5, lots 2 and 3, N1/2 lot 6, N1/2 SW1/4 SE1/4.	118.21	1,3
T. 40 N., R. 7 W.,		
sec. 6, S1/2 NE1/4.	80.00	1
T. 40 N., R. 15 W.,		
sec. 4, all of S1/2 SE1/4 above Virgin River rim.	70.00	1
T. 41 N., R. 2 W.,		
sec. 10, E1/2, E1/2 W1/2, SW1/4 NW1/4, W1/2 SW1/4;	600.00	3** (R&PP)
sec. 15, all;	640.00	3** (R&PP)
sec. 22, all;	640.00	3** (R&PP)
sec. 33, E1/2, E1/2 NW1/4, SW1/4;	560.00	3** (R&PP)
sec. 34, N1/2, SW1/4.	480.00	3** (R&PP)
T. 41 N., R. 5 W.,		
sec. 20, W1/2 NW1/4.	80.00	1
T. 41 N., R. 6 W.,		
sec. 16, S1/2;	320.00	1,3** (R&PP)
sec. 31, S1/2 NE1/4, SE1/4 NW1/4, NE1/4 SW1/4, N1/2 SE1/4, SE1/4 SE1/4;	280.00	1
sec. 33, S1/2.	320.00	3** (R&PP)
T. 41 N., R. 7 W.,		
sec. 13, NW1/4, N1/2 SW1/4, SW1/4 SW1/4;	280.00	3*** (A&AIA)
sec. 14, E1/2 NE1/4, SW1/4 NE1/4, S1/2 NW1/4, S1/2;	520.00	3*** (A&AIA)
sec. 23, NE1/4 NE1/4, W1/2 NE1/4, E1/2 NW1/4.	200.00	3
T. 41 N., R. 12 W.,		
sec. 6, lots 1 to 5, incl., SE1/4 NW1/4.	237.74	1
T. 41 N., R. 13 W.,		
sec. 1, S1/2 N1/2, SW1/4, W1/2 SE1/4.	400.00	1
T. 41 N., R. 15 W.,		
sec. 33, lots 4 and 5, SW1/4 NE1/4, NW1/4 SE1/4, N1/2 SW1/4 SE1/4, SE1/4 SW1/4 SE1/4, SE1/4 SW1/4.	209.53	1,3**(R&PP)
T. 39 N., R. 6 E.,		
sec. 33, (that portion east of Highway 89A);	approx. 160.00	3*** (A&AIA)
sec. 34, W1/2 W1/2.	approx. 160.00	3*** (A&AIA)
T. 39 N., R. 7 E.,		
sec. 4, E1/2 SW1/4 NE1/4, NE1/4 NW1/4 SE1/4, W1/2 NW1/4 SE1/4.	50.00	3*** (A&AIA)
T. 41 N., R. 8 E.,		
sec. 17, S1/2;	320.00	3** (R&PP)
sec. 18, SE1/4;	160.00	3** (R&PP)
sec. 19, NE1/4;	160.00	3** (R&PP)
sec. 20, N1/2.	320.00	3** (R&PP)

Comprising 7,405.45 acres.

* Public lands identified for disposal by sale meets sales criterion number 1 and 3 as described in Sec. 203(a) of FLPMA, as follows:
(1) such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another federal department or agency; or
(3) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in federal ownership.

** Recreation and Public Purposes Act

*** Airport and Airway Improvement Act

APPENDIX 7 (CONTINUED)
PUBLIC LANDS IDENTIFIED FOR DISPOSAL BY SALE OR EXCHANGE

EXCHANGE ONLY

Description	Acreage
T. 39 N., R. 6 E.,	
sec. 27, SW1/4 SW1/4.	40.00
T. 39 N., R. 7 E.,	
sec. 7, lots 6 and 7, S1/2 S1/2 (that portion between the wilderness boundary, U.S. Highway 89A, Vermillion Cliffs Lodge, and Badger Creek Homeowners Association).	approx. 44.00
T. 40 N., R. 3 E.,	
sec. 34, SE1/4 NE1/4, S1/2 NE1/4 SE1/4, N1/2 SW1/4 SE1/4, SE1/4 SE1/4, S1/2 NE1/4 NE1/4, SE1/4 NE1/4 SW1/4, NE1/4 SE1/4 SW1/4.	160.00
T. 34 N., R. 8 W.,	
sec. 15, S1/2 SE1/4 SW1/4;	20.00
sec. 22, W1/2 W1/2 NE1/4.	40.00
T. 39 N., R. 5 W.,	
sec. 7, E1/2;	320.00
sec. 8, N1/2.	320.00
T. 39 N., R. 6 W.,	
sec. 3, lots 1 and 2, N1/2 NE1/4, SE1/4;	319.98
sec. 10, E1/2;	320.00
sec. 11, S1/2;	320.00
sec. 20, N1/2 NE1/4.	80.00
T. 39 N., R. 16 W.,	
sec. 3, SW1/4 SE1/4, N1/2 NE1/4 SW1/4;	60.00
sec. 9, SW1/4 NE1/4, SE1/4;	200.00
sec. 10, W1/2 NE1/4, SE1/4 NW1/4, NE1/4 SE1/4.	160.00
T. 40 N., R. 3 E.,	
sec. 34, SE1/4 NE1/4, S1/2 NE1/4 SE1/4, N1/2 SW1/4 SE1/4, SE1/4 SE1/4, S1/2 NE1/4 NE1/4, SE1/4 NE1/4 SW1/4, NE1/4 SE1/4 SW1/4.	160.00
T. 40 N., R. 5 W.,	
sec. 6, lots 2, 3, 4 and 7, SE1/4 SW1/4, NE1/4 SE1/4, S1/2 SE1/4.	276.44
T. 40 N., R. 6 W.,	
sec. 1, lots 1 to 4, incl., SE1/4 NE1/4, SW1/4 NW1/4, W1/2 SW1/4;	270.36
sec. 3, lots 1 and 2, N1/2 NE1/4, SE1/4;	294.90
sec. 4, lots 3 and 4, S1/2 NW1/4, SW1/4, W1/2 SE1/4;	375.02
sec. 5, lots 1 to 4, incl., S1/2 N1/2, E1/2 SW1/4, SE1/4;	590.44
sec. 6, lot 7, SE1/4, SE1/4 SW1/4;	237.55
sec. 7, lots 1 to 4, incl., E1/2, E1/2 W1/2;	630.16
sec. 8, NW1/4 NW1/4;	40.00
sec. 9, all;	640.00
sec. 17, S1/2;	320.00
sec. 18, lots 1 to 4, incl., E1/2, E1/2 W1/2;	630.00
sec. 19, lots 1 and 2, NE1/4, E1/2 NW1/4;	314.98
sec. 20, all;	640.00
sec. 27, E1/2;	320.00
sec. 34, E1/2.	320.00
T. 40 N., R. 7 W.,	
sec. 1, lots 1 to 4, incl., S1/2 N1/2, S1/2;	625.64
sec. 12, all;	640.00
sec. 13, all.	640.00
T. 40 N., R. 15 W.,	
sec. 6, lots 1 thru 7, S1/2 NE1/4, SE1/4 NW1/4, E1/2 SW1/4.	462.88

APPENDIX 7 (CONTINUED)
PUBLIC LANDS IDENTIFIED FOR DISPOSAL BY SALE OR EXCHANGE

EXCHANGE ONLY

Description	Acreage
T. 40 N., R. 16 W.,	
sec. 33, N1/2 NE1/4, NW1/4;	240.00
sec. 34, N1/2 NW1/4.	80.00
T. 41 N., R. 2 W.,	
sec. 23, all;	640.00
sec. 24, W1/2;	320.00
sec. 26, all;	640.00
sec. 35, N1/2 N1/2.	160.00
T. 41 N., R. 5 W.,	
sec. 30, lots 3 and 4, E1/2 SW1/4;	158.71
sec. 31, lots 1 to 4, incl., E1/2, E1/2 W1/2.	638.52
T. 41 N., R. 6 W.,	
sec. 5, SW1/4 SE1/4, SE1/4 SW1/4;	80.00
sec. 8, W1/2 E1/2 E1/2, NW1/4 SE1/4;	120.00
sec. 25, E1/2 SE1/4;	80.00
sec. 34, S1/2;	320.00
sec. 35, NE1/4, S1/2.	480.00
T. 41 N., R. 7 W.,	
sec. 4, lots 3 and 4, S1/2 NW1/4, SW1/4 NE1/4, NE1/4 SW1/4, N1/2 SE1/4, SE1/4 SE1/4;	360.39
sec. 26, S1/2 NE1/4, S1/2;	400.00
sec. 35, all.	640.00
T. 41 N., R. 12 W.,	
sec. 8, SW1/4 NW1/4, W1/2 SW1/4.	120.00
T. 41 N., R. 15 W.,	
sec. 31, E1/2;	320.00
sec. 35, all south of I-15.	160.00
T. 42 N., R. 6 W.,	
sec. 32, lots 3 and 4, N1/2 SW1/4, W1/2 NE1/4 NW1/4 SE1/4, W1/2 NW1/4 SE1/4, W1/2NW1/4 SE1/4 NW1/4 SE1/4, S1/2 SE1/4 NW1/4 SE1/4, NW1/4 SE1/4 NW1/4 SE1/4.	163.37
T. 42 N., R. 7 W.,	
sec. 33, lots 2, 3 and 4, S1/2.	393.74
T. 42 N., R. 12 W.,	
sec. 31, all.	436.39
Comprising 17,783.47 acres.	

The public land will be conveyed under the following terms and conditions.

Subject to rights of record as follows:

Roads: A 18951 through A 18956, A 18557

Transmission lines: A 10117, A 16639, AR 017703, A 6016

APPENDIX 8
PRIVATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 33 N., R. 9 W.,	
sec. 3, lots 1 to 4, incl., S1/2 N1/2, S1/2;	636.44
sec. 5, lots 1 to 4, incl., S1/2 N1/2, S1/2;	637.84
sec. 7, lots 1 to 4, incl., E1/2 W1/2, E1/2;	637.04
sec. 9, all;	640.00
sec. 11, all.	640.00
T. 33 N., R. 10 W.,	
sec. 1, lots 1 to 4, incl., S1/2 N1/2, S1/2.	641.00
T. 34 N., R. 7 W.,	
sec. 3, SW1/4 NW1/4, NW1/4 SW1/4;	80.00
sec. 4, lot 2, S1/2 NE1/4, N1/2 SE1/4, SW1/4 SE1/4;	239.05
sec. 9, W1/2 NE1/4, NE1/4 SW1/4, SE1/4;	280.00
sec. 10, SW1/4 SW1/4;	40.00
sec. 20, NE1/4 SE1/4;	40.00
sec. 21, NE1/4, E1/2 NW1/4, N1/2 S1/2, SE1/4 SW1/4, SW1/4 SE1/4;	480.00
sec. 22, W1/2 NW1/4, NW1/4 SW1/4;	120.00
sec. 29, all;	640.00
sec. 31, all;	640.00
sec. 33, W1/2 NW1/4 NW1/4 SW1/4.	5.00
T. 34 N., R. 8 W.,	
sec. 19, NW1/4 NE1/4;	40.00
sec. 15, SW1/4 SW1/4;	40.00
sec. 22, NW1/4, N1/2 SW1/4, SE1/4 SW1/4.	280.00
T. 34 N., R 9 W.,	
sec. 9, SE1/4 SE1/4;	40.00
sec. 31, lots 1 to 4, incl., E1/2 W1/2, E1/2;	639.32
sec. 33, all.	640.00
T. 34 N., R. 10 W.,	
sec. 35, all.	640.00
T. 35 N., R. 7 W.,	
sec. 3, lots 1 to 4, S1/2 N1/2, S1/2;	640.20
sec. 18, SE1/4 SE1/4;	40.00
sec. 19, NE1/4 NE1/4;	40.00
sec. 20, N1/2, E1/2 SW1/4, SE1/4;	560.00
sec. 27, SW1/4 NE1/4, S1/2 NW1/4, N1/2 SW1/4;	200.00
sec. 28, SE1/4 NE1/4, S1/2 SW1/4, SE1/4;	280.00
sec. 33, NW1/4 NE1/4, N1/2 NW1/4, SW1/4 NW1/4.	160.00
T. 35 N., R. 8 W.,	
sec. 3, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.24
sec. 4, lots 1 and 2, S1/2 NE1/4, SE1/4;	318.75
sec. 6, lots 5, 6 and 7, SE1/4 SW1/4;	147.75
sec. 7, lots 1, 2 and 3;	108.27
sec. 9, E1/2;	320.00
sec. 10, all;	640.00
sec. 14, S1/2 SW1/4;	80.00
sec. 15, S1/2 SE1/4;	80.00
sec. 20, SW1/4;	160.00
sec. 29, NW1/4, N1/2 SW1/4;	240.00
sec. 30, lots 3 and 4, E1/2 SW1/4;	152.92
sec. 31, lots 1 and 2, E1/2 NW1/4.	152.99
T. 35 N., R. 9 W.,	
sec. 1, S1/2 N1/2, S1/2;	480.00
sec. 12, N1/2, N1/2 S1/2, SE1/4 SW1/4;	520.00
sec. 13, SW1/4 NE1/4, NE1/4 SW1/4, N1/2 SE1/4;	160.00
sec. 15, SE1/4;	160.00

APPENDIX 8 (CONTINUED)
PRIVATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 35 N., R. 9 W., (cont.)	
sec. 22, E1/2;	320.00
sec. 25, S1/2;	320.00
sec. 26, E1/2 SE1/4;	80.00
sec. 27, NE/14.	160.00
T. 36 N., R. 8 W.,	
sec. 6, SW1/4 NE1/4, SE1/4 NW1/4, E1/2 SW1/4, W1/2 SE1/4;	240.00
sec. 7, lots 1 and 2, N1/2 NE1/4, E1/2 NW1/4;	230.34
sec. 10, SW1/4 NW1/4.	40.00
T. 36 N., R. 9 W.,	
sec. 12, NE1/4 NE1/4, S1/2 NE1/4, NE1/4 SE1/4.	160.00
T. 37 N., R. 8 W.,	
sec. 17, SE1/4.	160.00
T. 38 N., R. 5 W.,	
sec. 3, SE1/4 SE1/4;	40.00
sec. 15, NW1/4 SE1/4.	40.00
T. 38 N., R. 6 W.,	
sec. 4, lot 2;	38.99
sec. 25, NW1/4 NW1/4.	40.00
T. 38 N., R. 8 W.,	
sec. 15, NE1/4 SE1/4;	40.00
sec. 22, NE1/4 SE1/4, S1/2 SE1/4;	120.00
sec. 27, NE1/4 NE1/4.	40.00
T. 39 N., R. 4 W.,	
sec. 24, E1/2;	320.00
sec. 25, E1/2.	320.00
T. 39 N., R. 9 W.,	
sec. 22, SW1/4 NW1/4, NW1/4 SW1/4;	80.00
sec. 35, NE1/4 NW1/4.	40.00
T. 39 N., R. 16 W.,	
sec. 2, N1/2 NW1/4;	80.00
sec. 3, S1/2 NW1/4 SW1/4, N1/2 SW1/4 SW1/4.	40.00
T. 40 N., R. 6 W.,	
sec. 17, S1/2.	320.00
T. 40 N., R. 7 W.,	
sec. 20, NE1/4 SE1/4.	40.00
T. 40 N., R. 15 W.,	
sec. 4, S1/2 SW1/4, NW1/4 NE1/4, river bottom in SW1/4 NE1/4;	135.00
sec. 17, S1/2 NW1/4, NW1/4 SW1/4;	120.00
sec. 18, NE1/4 SE1/4.	40.00
T. 40 N., R. 16 W.,	
sec. 25, N1/2 NE1/4, NW1/4.	240.00
T. 41 N., R. 5 W.,	
sec. 6, SE1/4 SW1/4;	40.00
sec. 7, E1/2 W1/2;	160.00
sec. 18, lots 2, 3 and 4, E1/2 W1/2.	278.24
T. 41 N., R. 6 W.,	
sec. 5, SE1/4 NW1/4, NE1/4 SW1/4;	80.00
sec. 11, E1/2 E1/2;	160.00

APPENDIX 8 (CONTINUED)
PRIVATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 41 N., R. 6 W., (cont.)	
sec. 13, NW1/4, S1/2;	480.00
sec. 14, E1/2 E1/2.	160.00
T. 41 N., R. 7 W.,	
sec. 4, W1/2 SW1/4, SE1/4 SW1/4, SW1/4 SE1/4;	160.00
sec. 5, lots 1 and 2, S1/2 NE1/4, NE1/4 SE1/4, S1/2 SE1/4;	280.19
sec. 6, lots 3 to 7, incl., SE1/4 NW1/4;	232.32
sec. 8, NE1/4 NE1/4;	40.00
sec. 9, NE1/4;	160.00
sec. 20, SE1/4 SE1/4, W1/2 SE1/4, SE1/4 SW1/4;	160.00
sec. 29, E1/2, E1/2 W1/2.	480.00
T. 41 N., R. 8 W.,	
sec. 1, S1/2 N1/2, N1/2 SE1/4, NE1/4 SW1/4, SW1/4 SE1/4;	320.00
sec. 2, S1/2 NE1/4, N1/2 SE1/4, SE1/4 SE1/4;	200.00
sec. 5, S1/2;	320.00
sec. 8, W1/2;	320.00
sec. 11, E1/2 NE1/4, NE1/4 SE1/4;	120.00
sec. 14, E1/2 SW1/4;	80.00
sec. 23, NE1/4 NE1/4, S1/2 NE1/4, SE1/4 NW1/4, N1/2 S1/2;	320.00
sec. 24, S1/2 NW1/4, N1/2 SW1/4, SE1/4 SW1/4;	200.00
sec. 25, NE1/4 NW1/4.	40.00
T. 41 N., R. 9 W.,	
sec. 4, lots 3 and 4, S1/2 NW1/4, SW1/4, S1/2 SE1/4;	399.63
sec. 5, lots 1 and 2, S1/2 NE1/4, N1/2 SE1/4;	239.41
sec. 10, S1/2 SW1/4;	80.00
sec. 14, SW1/4 NW1/4, W1/2 SW1/4;	120.00
sec. 15, S1/2 NE1/4, W1/2, SE1/4;	560.00
sec. 22, SE1/4 NE1/4.	40.00
T. 41 N., R. 14 W.,	
sec. 30, SW1/4 SW1/4.	40.00
T. 41 N., R. 15 W.,	
sec. 25, SE1/4 SE1/4;	40.00
sec. 34, SW1/4, NW1/4 NW1/4 SE1/4;	170.00
sec. 36, E1/2.	320.00
T. 41 N., R. 16 W.,	
sec. 12, W1/2 NE1/4, E1/2 NW1/4.	160.00
T. 42 N., R. 7 W.,	
sec. 31, lots 1 to 6, incl., E1/2 SE1/4, E1/2 SW1/4.	329.93

Comprising 26,129.86 acres in Mohave County.

COCONINO COUNTY

Description	Acreage
T. 37 N., R. 5 E.,	
sec. 4, lots 2 and 3, S1/2 NE1/4, SE1/4.	321.28
T. 38 N., R. 4 E.,	
sec. 7, SE1/4.	160.00

APPENDIX 8 (CONTINUED)
PRIVATE LANDS IDENTIFIED FOR ACQUISITION

COCONINO COUNTY

Description	Acreage
T. 38 N., R. 5 E.,	
sec. 5, patented mining claim described by Mineral Survey 2118A;	14.63
secs. 5 and 6, patented mining claim described by Mineral Survey 2118B;	4.98
sec. 6, lots 1 and 2, SW1/4 NE1/4, NE1/4 SW1/4;	160.72
sec. 8, lot 2;	31.63
secs. 8 and 9, patented mining claim described by Mineral Survey 2141;	17.03
sec. 29, NW1/4 NW1/4.	40.00
T. 39 N., R. 3 E.,	
secs. 2 and 3, patented mining claim described by Mineral Survey 2140;	15.50
sec. 3, SW1/4 SE1/4;	40.00
sec. 10, SE1/4 NE1/4;	40.00
sec. 11, E1/2 SW1/4, SW1/4 SE1/4;	120.00
sec. 14, NW1/4 NE1/4;	40.00
sec. 15, N1/2, SW1/4, W1/2 SE1/4;	560.00
sec. 22, N1/2 NW1/4;	80.00
sec. 35, NE1/4 SE1/4 SW1/4, SW1/4 SE1/4.	50.00
T. 39 N., R. 6 E.,	
sec. 28, NE1/4 SE1/4, SW1/4 NW1/4, SW1/4;	240.00
sec. 33, N1/2 NW1/4.	80.00
T. 39 N., R. 7 E.,	
sec. 3, lot 4 (part);	approx. 10.00
sec. 4, lot 1 (part), SE1/4 SE1/4 NE1/4;	approx. 30.00
sec. 7, SW1/4 SE1/4 (that portion east of Highway 89A);	3.97
sec. 18, E1/2 NE1/4 NW1/4 (that portion east of Highway 89A).	approx. 6.00
T. 40 N., R. 1 E.,	
sec. 21, all;	640.00
sec. 28, N1/2 SE1/4, SW1/4, SW1/4 SE1/4;	280.00
sec. 33, W1/2 NE1/4, NW1/4, N1/2 SW1/4, NW1/4 SE1/4.	360.00
T. 40 N., R. 3 E.,	
sec. 34, NE1/4 SE1/4.	40.00
T. 40 N., R. 6 E.,	
sec. 31, SW1/4 NE1/4, SE1/4 NW1/4, NE1/4 SW1/4, NW1/4 SE1/4.	160.00
T. 39 N., R. 1 W.,	
sec. 15, all;	640.00
sec. 21, E1/2;	320.00
sec. 22, S1/2 NE1/4, NW1/4, S1/2;	560.00
sec. 23, S1/2 SW1/4;	80.00
sec. 26, N1/2 NW1/4;	80.00
sec. 27, N1/2 NE1/4.	80.00
T. 41 N., R. 1 W.,	
sec. 3, lots 1 and 2, S1/2 NE1/4, SE1/4;	320.31
sec. 10, N1/2 NE1/4, E1/2 SW1/4, SE1/4;	320.00
sec. 11, NW1/4 NE1/4, N1/2 NW1/4, SW1/4;	280.00
sec. 14, W1/2;	320.00
sec. 15, E1/2, E1/2 W1/2;	480.00
sec. 22, N1/2 NE1/4, NE1/4 NW1/4;	120.00
sec. 23, NW1/4 NW1/4.	40.00

Comprising 7,186.05 acres in Coconino County.

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
COCONINO COUNTY

Description	Acreage
T. 36 N., R. 4 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	638.80
sec. 16, all.	640.00
T. 37 N., R. 4 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.96
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 5 E.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 38 N., R. 3 E.,	
sec. 2, lots 1 and 2, S1/2 NE1/4.	160.24
T. 38 N., R. 4 E.,	
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 38 N., R. 5 E.,	
sec. 31, NW1/4 SE1/4;	40.00
sec. 32, all;	640.00
sec. 36, S1/2 SW1/4.	80.00
T. 38 N., R. 6 E.,	
sec. 16, all.	640.00
T. 39 N., R. 5 E.,	
sec. 16, SE1/4 SE1/4;	40.00
sec. 17, all;	640.00
sec. 18, lots 1 to 4, incl., E1/2, E1/2 W1/2.	630.36
T. 40 N., R.1E.,	
sec. 16, all.	640.00
T. 40 N., R. 3 E.,	
sec. 36, SE1/4.	160.00
T. 40 N., R. 5 E.,	
sec. 1, lots 1 to 4, incl., S1/2 N1/2, S1/2;	644.76
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	643.20
sec. 11, all;	640.00
sec. 12, all;	640.00
sec. 25, all;	640.00
sec. 36, all.	640.00
T.40 N., R.6 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	646.84
sec. 29, S1/2 S1/2;	160.00
sec. 30, lots 1 to 4, incl., E1/2, E1/2 W1/2;	625.00
sec. 31, lots 1 to 4, incl., E1/2 E1/2, NW1/4 NE1/4, NE1/4 NW1/4, SE1/4 SW1/4, SW1/4 SE1/4;	466.00
sec. 32, all.	640.00
T. 41 N., R.1 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.20
sec. 16, all;	640.00
sec. 32, SE1/4.	160.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
COCONINO COUNTY

Description	Acreage
T. 41 N., R. 2 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.76
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 3 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.08
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 4 E.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.08
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 5 E.,	
sec. 32, all;	640.00
sec. 35, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 8 E.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 42 N., R. 1 E.,	
sec. 36, lots 1 to 4, incl., S1/2.	478.84
T. 42 N., R. 2 E.,	
sec. 32, lots 1 to 4, incl., S1/2;	476.76
sec. 36, lots 1 to 4, incl., S1/2.	471.36
T. 42 N., R. 3 E.,	
sec. 32, lots 1 to 4, incl., S1/2.	315.28
T. 42 N., R. 6 E.,	
sec. 36, lots 1 to 4, incl., S1/2.	481.68
T. 39 N., R. 1 W.,	
sec. 16, all;	640.00
sec. 24, W1/2 NW1/4, NW1/4 SW1/4;	120.00
sec. 32, all.	640.00
T. 40 N., R. 1 W.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 40 N., R. 2 W.,	
sec. 32, W1/2, SE1/4;	480.00
sec. 36, all.	640.00
T. 41 N., R. 1 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.28
sec. 16, all;	640.00
sec. 36, all.	640.00

Comprising 36,717.48 acres in Coconino County.

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 32 N., R. 12 W.,	
sec. 2, N1/2 SE1/4.	80.00
T. 33 N., R. 11 W.,	
sec. 16, all.	640.00
T. 33 N., R. 12 W.,	
sec. 36, all.	640.00
T. 33 N., R. 14 W.,	
sec. 36, SE1/4 SE1/4.	40.00
T. 33 N., R. 15 W.,	
sec. 2, lots 1 to 4, incl., SE1/4 NE1/4, S1/2 NW1/4, S1/2.	600.40
T. 34 N. R. 7 W.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 34 N., R. 8 W.,	
sec. 16, N1/2, SW1/4.	480.00
T. 34 N., R. 9 W.,	
sec. 32, all.	640.00
T. 34 N., R. 10 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	641.94
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 34 N., R. 11 W.,	
sec. 32, W1/2 NE1/4, NW1/4.	240.00
T. 34 N., R. 12 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	630.52
sec. 16, all;	640.00
sec. 36, all.	640.00
T. 34 N., R. 13 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	626.96
sec. 16, all.	640.00
T. 34 N., R. 14 W.,	
sec. 32, SW1/4 SW1/4.	40.00
T. 34 N., R. 15 W.,	
sec. 2, lot 4, S1/2 NW1/4, N1/2 SE1/4, SW1/4 SE1/4.	237.42
T. 35 N., R. 5 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2.	639.96
T. 35 N., R. 6 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2.	640.28
T. 35 N., R. 7 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	638.64
sec. 32, all.	640.00
T. 35 N., R. 8 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.08
sec. 32, NW1/4, N1/2 SW1/4.	240.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVECOUNTY

Description	Acreage
T. 35 N., R. 9 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.84
sec. 16, all;	640.00
sec. 18, SW1/4 NE1/4, NE1/4 NW1/4, E1/2 SE1/4;	160.00
sec. 19, NE1/4, E1/2 NW1/4, N1/2 SE1/4;	320.00
sec. 20, W1/2 NW1/4, NW1/4 SW1/4;	120.00
sec. 32, all;	640.00
sec. 36, N1/2, N1/2 S1/2.	480.00
T. 35 N., R. 10 W.,	
sec. 5, lots 1 to 4, incl., S1/2 N1/2, S1/2;	643.76
sec. 16, all;	640.00
sec. 29, NW1/4;	160.00
sec. 30, W1/2 NE1/4;	80.00
sec. 32, all;	640.00
sec. 34, all;	640.00
sec. 36, all.	640.00
T. 35 N., R. 11 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	641.96
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 35 N., R. 13 W.,	
sec. 16, SW1/4 SE1/4, E1/2 SE1/4;	120.00
sec. 36, N1/2, E1/2 SE1/4.	400.00
T. 35 N., R. 15 W.,	
sec. 16, SE1/4 NE1/4.	40.00
T. 36 N., R. 4 W.,	
sec. 2, W1/2 SW1/4.	80.00
T. 36 N., R. 6 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	624.00
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 36 N., R. 7 W.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 36 N., R. 8 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	635.00
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 36 N., R. 9 W.,	
sec. 16, N1/2, SW1/4, N1/2 SE1/4;	560.00
sec. 32, SW1/4 NE1/4, NW1/4 SE1/4;	80.00
sec. 36, S1/2 NE1/4, SE1/4 SW1/4, SE1/4.	280.00
T. 36 N., R. 10 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	638.20
sec. 5, lots 1 and 2, S1/2 NE1/4;	163.88
sec. 6, lots 1 and 2, S1/2 NE1/4;	165.59
sec. 8, all;	640.00
sec. 9, N1/2 SW1/4, W1/2 SE1/4;	560.00
sec. 10, N1/2 SW1/4 SW1/4;	360.00
sec. 16, N1/2, NW1/4 SW1/4, NE1/4 SE1/4, S1/2 S1/2;	560.00
sec. 17, all;	640.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 36 N., R. 10 W., (cont.)	
sec. 20, N1/2;	320.00
sec. 29, W1/2;	320.00
sec. 31, lots 1 to 4, incl., E1/2 W1/2, E1/2;	632.64
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 36 N., R. 11 W.,	
sec. 2, lots 3 and 4, S1/2 NW1/4, S1/2;	489.30
sec. 15, all;	640.00
sec. 16, E1/2, NE1/4 SW1/4, S1/2 SW1/4;	440.00
sec. 22, all;	640.00
sec. 27, S1/2 NE1/4, NW1/4, S1/2;	560.00
sec. 28, all;	640.00
sec. 31, lots 1 to 4, incl., E1/2 W1/2, E1/2;	629.08
sec. 32 E1/2 NE1/4, SW1/4 NE1/4, W1/2, SE1/4;	600.00
sec. 36, all.	640.00
T. 36 N., R. 12 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	671.28
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 36 N., R. 13 W.,	
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 36 N., R. 16 W.,	
sec. 4, S1/2;	320.00
sec. 8, all;	640.00
sec. 9, all;	640.00
sec. 16, W1/2 SE1/4;	80.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 4 W.,	
sec. 16, E1/2, SW1/4.	480.00
T. 37 N., R. 5 W.,	
sec. 32, all.	640.00
T. 37 N., R. 7 W.,	
sec. 2, lots 1 to 4, incl., S1/2 NW1/4;	240.00
sec. 36, SE1/4 SE1/4.	40.00
T. 37 N., R. 8 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.76
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 9 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.72
sec. 10, E1/2;	320.00
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 10 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	670.32
sec. 10, S1/2;	320.00
sec. 15, all;	640.00
sec. 16, all;	640.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 37 N., R. 10 W., (cont.)	
sec. 21, all;	640.00
sec. 22, all;	640.00
sec. 32, all.	640.00
T. 37 N., R. 11 W.,	
sec. 16, N1/2, SW1/4, W1/2 SE1/4, SE1/4 SE1/4;	600.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 12 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	643.04
sec. 36, N1/2, SW1/4, E1/2 SE1/4, SW1/4 SE1/4.	600.00
T. 37 N., R. 13 W.,	
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 37 N., R. 14 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.84
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 38 N., R. 4 W.,	
sec. 32, SE1/4 SE1/4.	40.00
T. 38 N., R. 5 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	638.24
sec. 15, N1/2, E1/2 SW1/4, SW1/4 SW1/4, SE1/4;	600.00
sec. 16, all;	640.00
sec. 21, all;	640.00
sec. 22, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 38 N., R. 6 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	637.84
sec. 4, lot 4, S1/2 N1/2, S1/2;	518.84
sec. 5, lots 1 to 4, incl., S1/2 N1/2, S1/2;	633.56
sec. 6, lots 1 to 7, incl., S1/2 NE1/4, SE1/4 NW1/4, E1/2 SW1/4, SE1/4;	622.87
sec. 11, all;	640.00
sec. 12, all;	640.00
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 38 N., R. 7 W.,	
sec. 36, W1/2 SE1/4.	80.00
T. 38 N., R. 8 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	641.80
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 38 N., R. 9 W.,	
sec. 16, N1/2 SW1/4, SW1/4 SW1/4;	120.00
sec. 32, all;	640.00
sec. 36, N1/2 NW1/4, W1/2 SW1/4, W1/2 SE1/4, SE1/4 SE1/4.	280.00
T. 38 N., R. 10 W.,	
sec. 2, lot 1, S1/2;	359.74
sec. 16, W1/2.	320.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 38 N., R. 12 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	645.72
sec. 10, all;	640.00
sec. 36, all.	640.00
T. 39 N., R. 4 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	640.16
sec. 13, all;	640.00
sec. 14, E1/2;	320.00
sec. 16, all;	640.00
sec. 25, W1/2;	320.00
sec. 36, all.	640.00
T. 39 N., R. 5 W.,	
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 39 N., R. 6 W.,	
sec. 14, W1/2, SE1/4;	480.00
sec. 16, all;	640.00
sec. 29, all;	640.00
sec. 31, lots 1 to 4, incl., E1/2, E1/2 W1/2;	631.60
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 39 N., R. 8 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	623.72
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 39 N., R. 9 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	628.24
sec. 16, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 39 N., R. 12 W.,	
sec. 36, all.	640.00
T. 39 N., R. 13 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2.	639.08
T. 40 N., R. 3 W.,	
sec. 32, all.	640.00
T. 40 N., R. 7 W.,	
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 40 N., R. 9 W.,	
sec. 16, all;	640.00
sec. 32, N1/2;	320.00
sec. 36, N1/2, N1/2 SW1/4, NE1/4 SE1/4.	440.00
T. 40 N., R. 10 W.,	
sec. 16, N1/2 NW1/4, E1/2 SW1/4, SW1/4 SW1/4, SE1/4;	360.00
sec. 32, SW1/4 NE1/4, NW1/4.	200.00
T. 40 N., R. 11 W.,	
sec. 16, NE1/4 NE1/4.	40.00
T. 40 N., R. 12 W.,	
sec. 16, SE1/4.	160.00

APPENDIX 8 (CONTINUED)
STATE LANDS IDENTIFIED FOR ACQUISITION
MOHAVE COUNTY

Description	Acreage
T. 40 N., R. 15 W.,	
sec. 16, S1/2 NW1/4 NE1/4, SW1/4 NE1/4, W1/2 SE1/4 NE1/4, SE1/4.	240.00
T. 40 N., R. 16 W.	
sec. 26, E1/2 SE1/4.	80.00
T. 41 N., R. 7 W.,	
sec. 8, S1/2;	320.00
sec. 16, all;	640.00
sec. 32, all.	640.00
T. 41 N., R. 8 W.,	
sec. 36, all.	640.00
T. 41 N., R. 9 W.,	
sec. 2, lots 1 to 4, incl., S1/2 N1/2, S1/2;	639.92
sec. 12, all;	640.00
sec. 16, all;	640.00
sec. 17, all;	640.00
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 13 W.,	
sec. 32, all;	640.00
sec. 36, all.	640.00
T. 41 N., R. 15 W.,	
sec. 18, all;	640.00
sec. 19, all;	640.00
sec. 30, all.	640.00
T. 41 N., R. 16 W.,	
sec. 2, all;	640.00
sec. 12, E1/2 NE1/4, W1/2 NW1/4, S1/2;	480.00
sec. 13, E1/2.	320.00
T. 42 N., R. 7 W.,	
sec. 32, lots 1 to 4, incl., S1/2.	416.48
T. 42 N., R. 8 W.,	
sec. 31, lots 1 to 6, incl., E1/2 SW1/4, SE1/4;	410.96
sec. 32, lots 1 to 4, incl., S1/2.	410.40
T. 42 N., R. 9 W.,	
sec. 32, lots 1 to 4, incl., S1/2;	406.52
sec. 36, lots 1 to 4, incl., S1/2.	408.72
T. 42 N., R. 16 W.,	
sec. 36, lots 1 to 3, incl.	90.71

Comprising 114,951.53 acres in Mohave County.

COCONINO AND MOHAVE COUNTIES

Description	Acreage
T. 38 N., R. 3 W.,	
sec. 16, all;	640.00
sec. 32, lot 1, NE1/4, W1/2, N1/2 SE1/4, SW1/4 SE1/4.	639.41

Comprising 1,279.41 acres in Coconino and Mohave Counties.

APPENDIX 9
AVAILABILITY OF LANDS FOR FLUID LEASABLE MINERAL ACTIVITY RELATIVE TO RESOURCE POTENTIAL

PROPOSED PLAN

Category	Potential			
	Low	Moderate	High	Total
Category A Areas open to lease subject to standard terms and conditions.	848,200	1,942,600	0	2,771,000
Category B Areas open to lease subject to seasonal restrictions.	269,900	0	0	269,900
Category C Areas open to lease subject to no surface occupancy.	90,400	47,400	0	157,600
Category D Areas closed to leasing.	155,600	110,000	0	265,600
Total	1,364,100	2,100,000	0	3,464,100*

*The total number of acres used in this table reflects the total number of surface acres in the Arizona Strip District including BLM, state, and private. This has been done for comparison purposes only so that a consistent number of total acres may be used in the table without regard to proposed land ownership adjustments. The actual acreage in each category may vary slightly from those shown in this table due to the description of the acreage by legal subdivision.

FLUID MINERAL LEASING CATEGORIES

Category A

Under the preferred alternative, approximately 2,790,800 acres would be open to lease subject to standard lease terms and conditions.

Category B

In order to protect peregrine falcon during the nesting season, exploration, drilling and other surface-disturbing activities will be allowed only during the period from August 1 through March 1. This limitation does not apply to the maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by the authorized officer of the federal surface management agency if it is shown to the satisfaction of the authorized officer that no adverse impacts to peregrine falcon would occur. This limitation would apply to approximately 230,000 acres.

In order to protect bighorn sheep, exploration, drilling and other surface- disturbing activities will be allowed only during the period from June 1 through November 30. This limitation does not apply to the maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by the authorized officer of the federal surface management agency if it is shown to the satisfaction of the authorized officer that adverse impacts to the bighorn sheep would not occur. This limitation would apply to approximately 39,900 acres.

APPENDIX 9 (CONTINUED)
AVAILABILITY OF LANDS FOR FLUID LEASABLE MINERAL ACTIVITY RELATIVE TO RESOURCE POTENTIAL

Category C

In order to protect important scenic values, no surface occupancy or other surface disturbance will be allowed within the Virgin River Gorge scenic withdrawal. Exceptions to this limitation may be specifically authorized in writing by the authorized officer of the federal surface management agency if it is shown to the satisfaction of the authorized officer that the proposed disturbance or occupancy will not substantially impair the visual resources of the area. This limitation would apply to approximately 3,300 acres.

In order to protect important scenic values, no surface occupancy or other surface disturbance will be allowed within Kanab Creek or Grama Canyon. Exceptions to this limitation may be specifically authorized in writing by the authorized officer of the federal surface management agency if it is shown to the satisfaction of the authorized officer that the proposed disturbance or occupancy will not substantially impair the visual resources of the area. This limitation would apply to approximately 20,100 acres.

In order to protect important scenic values, no surface occupancy or other surface disturbance will be allowed on slopes in excess of 30 percent along or within the following areas: the north slopes of Mokiac and Seegmiller mountains; Hurricane Cliffs; Diamond Butte; upper and lower Grand Wash Cliffs; Parashant, Andrus, Hidden, and Dansil canyons; and the Moccasin Mountains. Exceptions to this limitation may be specifically authorized in writing by the authorized officer of the federal surface management agency if it is shown to the satisfaction of the authorized officer that the proposed disturbance or occupancy will not impair the visual resources of the area. This limitation would apply to approximately 134,200 acres.

Category D

In order to protect wilderness values, eight areas encompassing some 265,600 acres on the Arizona Strip District were designated as wilderness by Congress in 1984. These areas were withdrawn from mineral leasing at that time.

APPENDIX 10
CULTURAL RESOURCE MANAGEMENT GUIDELINES

Manage For Information Potential

Cultural resources included under this objective are capable of contributing useful scientific, historic, or management information. This information potential is to be protected to the extent needed, by physical or administrative means, until the potential has been realized through appropriate study.

Cultural resources which would be managed for their information potential have one or both of the following characteristics:

1. They are suitable for scientific study using currently available research techniques, including study that would result in their physical alteration.

2. They are suitable for controlled experimental studies which would aid in the management of other cultural properties; studies, for example, that are aimed at understanding the effects of natural or human-caused impacts to cultural properties, effectiveness of protection or monitoring efforts and similar objectives.

Habitation, historic agricultural, resource utilization and socio-cultural site types are known recorded properties in the RMP area. The existence of prehistoric agricultural site types is not well documented but they are believed to be in the RMP area. Cultural properties that are found and are not specifically designated to one of the management objectives below would be managed for their information potential because they contain retrievable information that is important to developing an understanding of the cultural history of the RMP area and surrounding region.

Cultural properties to be managed for their information potential may be studied for one or a combination of the following:

- They are suitable for study for satisfying the needs of an academic research proposal.

- They are suitable for short or long-term establishment of archaeological field schools.

- They are subjects of data recovery designed to mitigate the impacts of a competing land use.

- They are suitable for monitoring the effects of natural and human-caused impacts to cultural properties.

Such studies must be in accordance with BLM-approved research designs, data recovery plans and recordation standards. Bureau and non-Bureau personnel using cultural resources for this purpose must comply with the provisions of the Archaeological Resources Protection Act of 1979. Uses which will affect National Register-listed or -eligible properties will require consultation in accordance with 36 CFR 800 and applicable Memorandums of Agreement.

The information potential of cultural resources managed under this objective will be protected through monitoring of selected geographical areas or high-value sites, and occasional monitoring of others. Stabilization, fencing, signing, electronic, aerial and ground surveillance as well as public awareness efforts will be employed to achieve this objective.

Manage for Conservation

Cultural resources included under this objective have overriding scientific prehistoric and/or historic importance. Because of their scarcity, a research potential that surpasses the current state of the art, such resources are not considered appropriate subjects of studies that would cause physical alteration. They will be managed to maintain their present condition and protect them from potentially conflicting land or resource uses.

APPENDIX 10 (CONTINUED)
CULTURAL RESOURCE MANAGEMENT GUIDELINES

The National Register-listed archaeological site known as Antelope Cave and the National Register-eligible site known as Rock Canyon Shelter will be managed under the conservation objective. Both sites have been altered by authorized research and by vandalism but researchers believe that intact deposits may remain that with advanced methods of data collection and analysis may yield new information that could potentially advance our knowledge of the Archaic to Formative transition. All similar relatively undisturbed cave or rock shelter sites which may be discovered or acquired in the RMP area will also be managed for conservation, because sites from this period of transition are rare.

Archaeological sites from selected classes of cultural properties representing transition periods may be identified in future activity plans to create a data bank to be managed under this objective. The purpose is to preserve these sites for future study when analytical techniques are more sophisticated and the research contributions of these resources can be maximized. Management emphasis will be placed on protecting these resources with their cultural material in place. Only non-destructive studies and analysis will be permitted.

The management objectives determined for these cultural properties may be changed from conservation to information potential after determining that their research values can be realized through state-of-the-art methods of data collection and analysis. Such studies would then be subject to the standards and provisions identified under management for information potential.

Cultural properties of this class may be managed under the public values objective if their information potential has reached the point where educational, recreational and other public values would not result in the loss of important scientific values.

Interpretive efforts such as trails, signs and brochures may be considered for Antelope Cave after the access to the interior of the cave has been controlled. Other interpretive efforts for cultural properties under this management category may be considered but would not have a high priority.

Measures to conserve these cultural resources for the future will include high-priority status for monitoring (electronic, aerial and ground) and evaluating access that does not conflict with other resource uses. Stabilization efforts, such as erosion control, will be implemented as needed.

Manage for Public Values

Cultural resources included under this objective are particularly useful for their socio-cultural, educational, recreational or other public values. Their locations will be managed in a manner that gives adequate consideration to these values.

Cultural resources managed for public values generally possess one or both of the following characteristics:

1. They are perceived by a social and/or cultural group as having attributes which contribute to maintaining the heritage or existence of that group. Locations of traditional cultural or religious importance to Native Americans or Mormons, for example, would be of this kind.

2. They are appropriate for interpretive development as exhibits in place, for supervised participation in scientific or historic studies by members of amateur archaeological societies and for educational and recreational uses by members of the general public. Cultural resources of this kind which have been identified in the RMP area are Little Black Mountain, Colorado City sites, Pinenut, West Bench Pueblo, Nampaweap, Witch Pool, Nixon Sawmill/ Uinkaret Pueblo and Paiute Cave. Cultural ACECs not represented by one of the above sites if designated (Lost Spring, Moonshine Ridge and Johnson Spring), will include at least one site managed with public use as an objective. Other sites will be identified for public value management as studies are completed.

Accessibility, public demand, public sensitivity, cost-effectiveness and feasibility will be considered, among other factors, in managing cultural properties of this kind for educational or recreational use. Management might include signs, self-guided interpretive trails, brochures, supervised archaeological excavation, mapping and other forms of recordation, stabilization, visitor facilities, on-site public tours and long-term group stewardships.

APPENDIX 10 (CONTINUED)
CULTURAL RESOURCE MANAGEMENT GUIDELINES

Cultural resources identified by contemporary social and/or cultural groups would take into account the concerns and sensitivities of the groups involved. Information on such resources would be protected from public disclosure to the extent allowed by statute.

Management of cultural resources for public values will be carried out with an awareness of any information potential such resources might possess. Any development of a cultural property for educational or recreational use will be done in such a manner as to safeguard important scientific information and will be subject to the requirements of appropriate laws and regulations.

Activity Plans

Cultural resources in the RMP area will be allocated to specific uses in subsequent cultural resource management plans. Activity plans containing detailed management prescriptions for selected cultural properties will be developed after use allocations have been made. Cultural properties to be managed for conservation will receive the highest priority for activity planning. Areas for which activity plans will be prepared are, in priority order; Witch Pool, Nampaweap, Lost Spring Mountain, Moonshine Ridge, Johnson Spring, Mt. Trumbull and Paria Plateau.

Classes of Cultural Properties in the RMP Area

1. Habitat (includes):

   Prehistoric villages/towns
   Rock shelters and caves
   Historic villages/towns
   Pueblos
   Camps
   Pithouses
   Cabins

2. Agriculture (includes):

   Prehistoric terraces
   Water control devices
   Historic terraces
   Ranching facilities

3. Resource Utilization (includes):

   Prehistoric artifact scatters
   Mines
   Historic artifact scatters
   Roasting pits
   Trash middens
   Hearths
   Quarries
   Ovens
   Storage cists

4. Socio-cultural (includes):

   Historic inscriptions
   Prehistoric rock art
   Community rooms
   Religious
   Mortuary
   Historic roads and trails
   Kivas
   Prehistoric trails

APPENDIX 11
WATERSHED CONDITION CATEGORIZATION OF GRAZING ALLOTMENTS WITHIN ARIZONA STRIP DISTRICT

CATEGORY I

Atkin Well (N) - 5207
Buffalo Tank - 5335
Cedar Knoll - 5318
Cedar Wash - 4842
Cram - 5333
Dripping Spring - 4818
Duncan Tank - 4820
Faught Place - 4807
Grama Point - 5233
Grama Springs - 5225
Gulch - 5230
Hacks Reservoir - 5257
Heaton Findlay - 5237
Highway - 5412
Home Ranch - 4855
Hurricane Cliffs - 5251
Iverson - 4834
Jacob Canyon - 5317
Kanab Creek - 5321
Kanab Gulch - 5224
Lambing - 4838
Last Chance - 4815
Little Tank - 4853
Littlefield Community - 4827
Littlefield Free-Use - 4843
Lizard - 4857
Meeks - 5258
Mesquite Community - 4832
Mosby - 4835
Mosby-Nay - 4836
Mule Canyon - 4821
Mustang Spring - 4859
Pa's Pocket - 4848
Pakoon - 4802
Pakoon Spring - 4800
Pigeon Tank - 5322
Purgatory - 4831
Rock Canyon - 5200
Rock Canyon Tank - 5319
South Bullrush - 5234
Spendlove - 5215
Sullivan Canyon - 4810
Sunshine - 4863
Sunshine Tank - 5247
Tassi - 4851
Toquer Tank - 4861
Shinarump - 5301
Stateline - 5244
Wells - 5208
Whiterock Soapstone - 4804
Yellowstone - 5213

CATEGORY II

Badger Creek - 5341
Beaver Dam - 4828
Black Canyon - 4837
Black Knoll - 5215
Blake Pond - 4813
Bush Head - 5329
Button - 5308
Canaan Point - 5205
Cane Beds - 5212
Cedar Mountain (Utah)
Clay Spring - 4845
Clayhole - 5215
Cove - 5204
Cowboy Butte - 5310
Coyote Spring - 4805
Diamond Butte - 4833
Ferrin - 5246
Ferry Swale - 5336
Gunsight - 5320
Harris Well - 5238
Hat Knoll - 4837
Highway - 5309
Home Ranch - 5329
Homestead - 5253
House Rock - 5331
Jackson Tank - 4830
Johnson Run - 5319
Lee's Ferry - 5337
Little Wolf - 4814
Loco Point - 5260
Lost Spring Gap - 5300
Lower Hurricane - 4837
Mainstreet (winter) - 4808
Moonshine - 5237
Mormon Well - 4844
Mt. Trumbull - 4826
Parashant - 4829
Pat's Pond - 4862
Pine - 5329
Pocum Tank - 4840
Pratt Tank - 5314
Quail Canyon - 4857
Rider - 5305
Rock Pockets - 5213
Rosenberry - 4846
Sage - 5311
Soap Creek - 5332
Suicide - 5322
White Pocket - 5243
Wild Band - 5223

CATEGORY IV

Antelope - 5206
Antelope Spring - 5210
Atkin Well (S) - 5207
Belnap - 4849
Belnap West - 4822
Big Spring Pipeline - 4870
Black Rock - 4841
Cedar - 5258
Chatterly - 5307
Cottonwood - 4809
Coyote - 5327
Crosby Tank - 5219
Eight Mile Pass - 5304
Fern Tank - 5217
Flat Top - 5206
Franks Reservoir - 5325
Fuller Road - 5324
Glazier Dam - 5202
Grassie Mountain - 4825
Hacks - 5227
Hidden Spring - 4803
Highway - 5306
Imlay - 4817
Ivanpah - 4858
Jump Canyon - 4801
June Tank - 5221
Lamb Tank - 5257
Link Spring - 4819
Mainstreet (summer) - 4808
Mt. Logan - 5218
Mud & Cane - 4850
Muggins Flat - 5313
Penn's Well - 4852
Pipe Valley - 5242
Scotties Seep - 5236
Shuttleworth - 5306
Sullivan Tank - 4816
Sunshine Point - 5218
Swapp Tank - 5248
Temple Trail - 5216
Tuweep - 5220
Valley Wash - 5234
Wildcat - 4854
Wolfhole Canyon - 4811
Wolfhole Lake - 4823
Water Canyon - 5257
Spooks Knoll - 5319
Two Mile - 5328
White Sage - 5349
Wolfhole Mountain - 4839

APPENDIX 11 (CONTINUED)
WATERSHED CONDITION CATEGORIZATION
OF GRAZING ALLOTMENTS WITHIN ARIZONA STRIP DISTRICT

APPROXIMATE CATEGORY	DESCRIPTION	FEDERAL ACREAGE
I	Watershed units are in satisfactory condition and are not especially susceptible to wind and water erosion	808,000
II	Watershed units are in satisfactory condition but are susceptible to wind and water erosion following disturbance	1,226,000
IV	Watershed units currently are in unsatisfactory condition and the soils would be responsive to treatment	1,188,000
	The district has no Category III watershed areas	



APPENDIX 12
PRIORITY SPECIES/STATE SPECIAL STATUS ANIMALS AND PLANTS THAT OCCUR OR COULD OCCUR IN RMP AREA

Animals

Woundfin minnow	*Plagopterus argentissimus*
Virgin River spinedace	*Lepidomeda mollispinus mollispinus*
Virgin River chub	*Gila robusta seminuda*
Relict leopard frog	*Rana onca*
Common black hawk	*Buteogallus anthracinus anthracinus*
Southern bald eagle	*Haliaetus leucocephalus leucocephalus*
Osprey	*Pandion haliaetus*
American peregrine falcon	*Falco peregrinus anatum*
Sharp-shinned hawk	*Accipiter striatus*
Southern spotted owl	*Strix occidentalis lucida*
Northern goshawk	*Accipiter gentilis*
Ferruginous hawk	*Buteo regalis*
Swainson's hawk	*Buteo swainsoni*
Snowy egret	*Egretta thula brewsteri*
American bittern	*Botancus lentignosus*
Black-crowned night heron	*Nyticorax nyticorax*
White-faced ibis	*Plegadis chihi*
Western snowy plover	*Charadrius alexandrinus nivosus*
Yellow-billed cuckoo	*Coccyzus americanus*
Belted kingfisher	*Megaceryle alcyon*
Southwestern willow flycatcher	*Empidonax traillii extimus*
Black-capped chickadee	*Parvus atricapillus*
Red bat	*Lasiurus borealis*
Spotted bat	*Euderma maculatum*
Gray wolf	*Canus lupus*
Marble Canyon kangaroo rat	*Dipodomys microps leucotis*
Desert tortoise	*Xerobates agassizii*
Western skink	*Eumeces skiltonianus*
Northern leopard frog	*Rana pipiens*

APPENDIX 12 (CONTINUED)
PRIORITY SPECIES/STATE SPECIAL STATUS ANIMALS AND PLANTS THAT OCCUR OR COULD OCCUR IN RMP AREA

Plants

Vagabond Parsnip	*Aletes macdougali*
Parny Wild Parsley	*Lomatium parryi*
Narrowleaf Blue Star	*Amsonia tomentosa stenophylla*
Jones Blue Star	*Amsonia jonesii*
Hidden Horn Milkweed	*Asclepias crytoceras*
Hooker Balsam Root	*Balsamorhiza hookeri*
Silverleaf Sunray	*Enceliopsis argophylla*
Nodesten Sunray	*Enceliopsis nudicalis*
Hopi Sunflower	*Helianthus anomalus*
Longsprine Cotton Thorn	*Tetradymia axillaris longispina*
Blackrock Ground Daisy	*Townsendia smithii*
Atwood Catseye	*Crypthantha atwoodii*
Hermit Catseye	*Crypthantha capitate*
Utah Corycactus	*Coryphantha missouriensis marstonii*
Yellow Beavertail	*Opuntia basilaris avrea*
Navajo Bridge Cactus	*Opuntia nicholii*
Brady Plains Cactus	*Pediocactus bradyi*
Fickeisen Navajo Cactus	*Pediocactus peeblesianus fickeiseniae*
Gypsum Cactus	*Pediocactus sileri*
Devils Claw	*Schlerocactus spinosior*
James Whitlow Wort	*Paronychia jamesii*
Utah Sandpaper Bush	*Mortonia scabrella utahensis*
Silver Buffalo Berry	*Shepherdia argentea*
Beaked Milkvetch	*Astragalus acutirostris*
Barneby Milkvetch	*Astragalus barnebyi*
Beath Milkvetch	*Astragalus beathii*
Beaver Dam Milkvetch	*Astragalus geyeri triquetrius*
Striped Flower Milkvetch	*Astragalus striatiflorus*
Mohave Dalea	*Psorothamnus arborescens pubescens*
King Clover	*Trifolium kingii macilentum*
Littlefield Nama	*Nama pusillum*
Three Hearts	*Tricardia watsoni*
Hopi Sage	*Salvia pachphylla*
Blue Curls	*Trichostema micranthum*
Nevada Moonpod	*Selinocarpus nevadensis*
Slender Evening Primrose	*Camissonia exilis*
Least Evening Primrose	*Camissonia parvula*
Roaring Spr. Prickle Poppy	*Argemon arizonica*
Heerman Wild Buckwheat	*Eriogonum heermanii subracemosum*
Atwood Wild Buckwheat	*Eriogonum thompsonae atwoodii*
Scarlet Wild Buckwheat	*Eriogonum zionis coccineum*
Shrub Gilia	*Ipomopsis frutescens*
Juniper Buttercup	*Ranunculus juniperinus*
Desert Rose	*Rosa stellata*
Two-leaf Bedstraw	*Galium bifolium*
Red Alum Root	*Heuchera rubescens*
King Snapdragon	*Antirrhinun hingii*
Mt. Trumbull Beardtongue	*Penstemon distans*
Nevada Blue Grass	*Poa nevadensis*
Virgin Narrows Spike Moss	*Salaginella leucobryoides*
Apline watsonii	*Salaginella watsonii*

APPENDIX 13
FEDERALLY LISTED AND CANDIDATE CATEGORY 1 AND 2 PLANT AND ANIMAL SPECIES CONSIDERED FOR ANALYSIS

Listed Species*

Desert tortoise	*Xerobates agassizii*
Woundfin minnow	*Plagopterus argentissimus*
Virgin River chub	*Gila robusta seminuda*
Peregrine falcon	*Falco peregrinus anatum*
Southern bald eagle	*Haliaetus leucocephalus leucocephalus*
Welsh's milkweed	*Asclepias welshii*
Siler pincushion cactus	*Pediocactus sileri*
Brady pincushion cactus	*Pediocactus bradyi*

Candidate Category 1 (priority species)

Fickeisen's plains cactus	*Pediocactus peeblesianus* var. *fickeiseniae*
Bristly plains cactus	*Pediocactus paradinei*
Razorback sucker	*Xyrauchen texanus*

Candidate Category 2

Southern spotted owl	*Strix occidentalis*
Ferruginous hawk	*Buteo regalis*
Northern goshawk	*Accipiter gentilis apache*
White-faced ibis	*Plegadis chihi*
Western snowy plover	*Charadrius alexandrinus nivosus*
Mountain plover	*Charadrius montanus*
Southwestern Willow Flycatcher	*Empidonax traillii extimus*
Spotted bat	*Euderma maculatum*
Marble Canyon kangaroo rat	*Dipodomys microps leucotis*
Merriam's kangaroo rat	*Dipodomys merriami frenatus*
Virgin River spinedace	*Lepidomeda mollispinus mollispinus*
Arizona southwestern toad	*Bufo microscaphus microscaphus*
Grand Wash springsnail	*Pyrgulopsis bacchus*
Grand Canyon Cave Pseudoscorpion	*Archeolarca cavicola*
Locoweed	*Astragalus ampullarius* 6
Beaver Dam milkvetch	*Astragalus geyeri var. triquetrius*
Locoweed	*Astragalus holmgrenorium*
Slender evening primrose	*Camissonia exilis*
Virgin River thistle	*Cirsium virginensis*
Mt. Trumbull beardtongue	*Penstemon distans*
Bicolor penstemon	*Penstemon bicolor* spp. *roseus*
Desert rose	*Rosa stellata* (var. undefined as yet)
Long-billed curlew	*Numeicus americanus*
Scurf-pea	*Psoralia epipsila*

* With the exception of the southern bald eagle, all listed species are identified as priority species.

APPENDIX 14
HMP OBJECTIVES - VERMILLION RESOURCE AREA

SPECIES	CLAYHOLE HMP	PARIA-KANAB CREEK HMP	MT. TRUMBULL HMP
Pronghorn Antelope	Reestablish antelope on 661,000 acres of historic range: 400 in Grand Wash Planning Unit and 400 in Antelope Planning Unit. Increase fawn survival from 43 to 55 per 100 does.	Establish 100 antelope in House Rock Valley by 1990. Increase fawn survival from 5 to 25 per 100 does.	
Mule Deer	Improve habitat to support 500 mule deer.	Increase deer from 3 per section (180 deer) to 10 per section (600 deer) in the Buckskins by 1990. Increase deer from 1 per section (60 deer) to 3 per section (180 deer) on the Vermillion Cliffs rim by 1990. Increase deer from 1 per section (60 deer) to 2 per section (360 deer) in the Gunsight Point area by 1990. Determine need for habitat improvements on west rim and lower Kanab Creek Canyon by 1996.	Increase population from 2,000 to 4,000 yearlong by 1996. Increase fawn survival rate from 30 per 100 does to a 5-year average of 75 fawns per 100 does by 1996.
Bighorn Sheep		Reestablish 175 bighorn sheep in Paria Canyon - Vermillion Bench by 1995. Reestablish 130 sheep in Hacks Canyon-Kanab Creek by 2000.	
Turkey			Maximize turkey populations by protection and improvement of habitat.
Kaibab Squirrel			Establish a viable population in all suitable habitat in the ponderosa pine zone.
Chukar		Improve habitat and hunting opportunities by 1996.	Establish a population in Whitmore and Parashant canyons through transplants.
Fish		Ensure a native fish fauna is maintained in the Paria River drainage.	
Non-Game	Develop potential habitat for waterfowl and small game.	Provide for habitat needs of non-game species.	Ensure diversity and abundance of habitats for non-game species.

APPENDIX 15
HMP & HMAP OBJECTIVES - SHIVWITS RESOURCE AREA

SPECIES	BLACK ROCK HMP	PARASHANT HMP	VIRGIN RIVER-PAKOON BASIN HMP	TASSI-GOLD BUTTE HMAP
Mule Deer	Increase populations from 800 to 2,200. Increase fawn survival rates from 30 to 75 per 100 does by 1996. Manage areas above 6,000 feet as crucial wildlife habitat.	Attain 2,200 deer by 1995. Attain fawn survival of 50 per 100 does by 1995.		
Bighorn Sheep	Introduce desert bighorn sheep into the Virgin Mountains and provide suitable habitat management for 100 bighorn.	Reintroduce into Grand Wash Cliffs by 1985. Meet habitat needs for 100 bighorns.		
Turkey		Establish turkey population by 1990; manage ponderosa pine to support turkeys.		
Woundfin Minnow			Assure survival.	
Fish			Maintain native populations.	
Desert Tortoise			Assure effective management of tortoise habitat; inventory and monitoring.	
Raptors		Inventory and manage according to Bureau-wide Raptor HMP.	Monitor and maintain habitat for nesting and wintering raptors.	
Riparian		Maintain and upgrade all riparian areas.	Inventory, monitor, and protect aquatic areas for special status and riparian-dependent species.	
Wild Burro				Restore vegetation within critical areas to maintain ecological balance. Maintain a viable breeding population (90 -100 burros). Maintain free-roaming behavior of burros. Reduce impact of over-browsing and trailing. Monitor habitat interactions with livestock, bighorn sheep and desert tortoise.

APPENDIX 16
DESERT TORTOISE HABITAT CATEGORIZATION
ARIZONA STRIP DISTRICT

Direction from the BLM Desert Tortoise Range Wide Plan (RWP), pages 11- 12, states the following:

"Desert Tortoise Habitat Areas will be delineated by BLM district managers (with public review) to meet the three category goals. Such categorization of habitats will assist the BLM in attaining the overall tortoise habitat management goal established by the Director. That goal is translated into more specific goals for each habitat category. These category goals will, in turn, be reached by implementing the objectives and related management actions.

"The purpose of the categorization of habitats is to provide for future protection and management of these areas and their associated desert tortoise populations. Differing levels of management, consistent with category goals, will be applied to habitat areas in each category.

"The Bureau is committed to maintaining viable tortoise populations in Category 1 and 2 habitats through implementation of the management actions in the next section. Placing an area of habitat in Category 3 means that these areas are of lower value in sustaining viable populations of tortoise on public lands, and thus can be subjected to lower management intensity specifically for tortoises than habitats in the other categories.

"Note that tortoise density and population trends will often be more useful in evaluating progress within categories than for actual categorization of habitat areas. Usually, the overriding criteria for categorization will be viable population considerations and conflict resolvability. The concept of resolvability includes mitigation; thus, conflicts will be judged resolvable whenever the actions required to resolve them are within BLM's discretion.

" Where schedules permit, areas will be categorized through the RMP. Where schedules do not permit, categorizations will be completed using existing data and will be reconsidered whenever an RMP is prepared or revised. The results will be documented as a part of the approved plan."

The RWP instructs each state to prepare an implementation strategy that will provide guidance to the district level. The draft Arizona Implementation Strategy, pages 3-4, states that:

"The purpose of categorization is to set priorities for the protection and management of tortoise habitats. Habitats will be categorized shortly after they are inventoried. Thus, categorization will occur over the next 5 years, as inventory is accomplished, but the entire process will be completed almost simultaneously with completion of inventory.

"Habitat areas must be delineated prior to categorization. Each disjunct tortoise population in the Sonoran Desert of Arizona will be considered a separate population occupying its own habitat area. On the Arizona Strip, where tortoise populations are 'patchily continuous,' habitats will be delineated based on localized population density.

"Delineated habitats will be placed into one of three categories, as described in the Bureauwide management plan. Habitat manageability (resolvability of existing issues) and population density will be the principal factors considered in the initial categorization of tortoise habitats. Where such information is available, the other factors described in the Bureauwide plan (population trend, habitat condition and trend, and population importance), will also be used in the categorization process. Within Arizona, the following density ranges will guide differentiation between categories:

Category I	51 + tortoises per square mile;
Category II	21 to 50 tortoises per square mile;
Category III	1 to 20 tortoises per square mile;

APPENDIX 16 (CONTINUED)
DESERT TORTOISE HABITAT CATEGORIZATION
ARIZONA STRIP DISTRICT

"Much of Arizona's initial habitat categorizations are based upon data collected from transects and only a few square-mile plots. Only crude estimates of population density, and little information on population trend and habitat condition or trend, can be extrapolated from such data. Dependence upon population density as a major factor in categorizing habitats will lessen as additional data is acquired on habitat quality, population trends, and other factors. At this time, such information can only be acquired through monitoring. Categories of some habitats (and perhaps the numerical descriptions of the categories themselves) will change as better insight into tortoise ecology is acquired. Habitats will be recategorized as new data is acquired (through monitoring or other sources) that indicate they should be recategorized. The recategorization process is not intended to be a corrective mechanism to account for declines in habitat quality; the purpose of this Strategy and the management methods described in it is to prevent significant declines in habitat quality."

DECISION-MAKING PROCESS

The first step in the evaluation and delineation of tortoise habitat on the Arizona Strip was to examine the information on tortoise population densities, demographics, and trends. The importance of habitat to the maintenance of a viable population was then considered. Finally, the manageability of conflicts was analyzed.

Habitat delineation was based primarily on information gathered on the two desert tortoise study plots on the Arizona Beaver Dam Slope (Hohman and Ohmart, 1980; Duck and Snider, 1988) and from approximately 600 miles of 10-yard-wide tortoise survey transects, the vast majority of which were performed by Sheppard from 1980 through 1982 (Wilhelm, 1975; Sheppard, BLM files; Burge, 1979; Duck, pers. comm.). Additional information from study plots and transects in Utah and Nevada (Coffeen, pers. comm; Coombs, 1974, 1977; Minden, 1980; Minden and Metzger, 1984; Welker, 1986; Duncan, 1987, Woodbury and Hardy, 1948), and Arizona Strip wildlife observation reports was incorporated.

Tortoise densities of 20 to 60 per sq. mile have been reported on the Beaver Dam Slope in Arizona. Densities on the Utah slope have been declining steadily. Minden estimated between 16 and 60 per sq. mile in 1980, while Welker reported 24 to 44 per sq. mile in 1986. The Beaver Dam Slope is the only area for which we have good density information. Population densities vary considerably on the Slope and these density values can be considered reliable only for the study sites themselves; care must be taken in using the data to estimate densities elsewhere.

Elsewhere on the Arizona Strip, we have relied on survey transects as estimators of relative density. By comparing transects which examined the two study plots with other transects we developed a relative density indicator. Habitat delineations were drawn around clusters of transects sharing similar totals. The lines were located along features on 1:24,000-scale maps, using information on soils and vegetation. Admittedly, this is a best-guess effort at this time. Future transects will be accomplished to refine some lines. The Arizona Strip contains areas of potential habitat for which we have no data. These areas will also be inventoried and delineated.

Several assumptions were made in order to determine the importance of an area for the maintenance of a viable population. We must assume that prior to the arrival of European settlers the tortoise population in the area was viable. This population is genetically and morphologically distinct (Buth, 1986; Lamb, 1987). The Virgin River was a partial barrier to movement, but the entire area from the Pakoon to the Beaver Dam Slopes to the Mormon Mountains (and beyond) was one large, patchily continous population. Habitat fragmentation as a result of human development of the area (inundation of Lake Mead, construction of I-15, development of Mesquite and Littlefield/Beaver Dam) has effectively split the population into three areas: Pakoon/Gold Butte, Virgin Slopes, and the Beaver Dam/Mormon Mountains.

Despite apparent decreasing densities on adjacent areas in Utah, we have assumed that the Beaver Dam Slopes in Utah and Arizona, along with the neighboring portion of Nevada (Mormon Mountains), is large enough to support a viable population, given proper attention to the protection of that habitat. Utah BLM has proposed to designate the Critical Habitat Area as Category 1.

APPENDIX 16 (CONTINUED)
DESERT TORTOISE HABITAT CATEGORIZATION
ARIZONA STRIP DISTRICT

Desert tortoise habitat in the Pakoon is an extension of the Nevada Gold Butte population. Along the border, transects indicate moderate to high relative densities. This population is important for maintaining the viability of the Gold Butte Crucial Habitat population (as defined by Berry, 1984). Some exchange may occur between these tortoise and those along the Virgin Slopes.

The Virgin Slopes contain moderate to low relative desert tortoise densities. Due to habitat fragmentation from the increase in roads and houses, the main avenue for genetic exchange is being lost. The Virgin Mountains form a barrier to the south and east, while the Virgin River and I-15 create a subtantial barrier to the north. The growth of Mesquite and Bunkerville, Nevada, cause this population to become increasingly isolated. Habitat losses on private lands have increased with the increasing human population.

The impacts on tortoise habitat from increased urbanization and the concomitant human uses (agriculture, road-building, utility corridors, dumps, off-highway vehicles, feral dogs, vandalism, tortoise collecting, vegetation collecting) are the least manageable of all conflicts. Livestock uses and mineral exploration and development can create conflicts with tortoise that must be identified and prevented. Livestock use and mineral activity are allowed throughout tortoise habitat, and thus also were not factors. This is not to say that these activities are not factors in tortoise ecology, rather that they were not used as factors to delineate habitat.

The evaluation of relative population density based on study plot and transect information indicated there are four density categories: high, medium, low, and unknown. Those areas identified as high, medium, or low were evaluated for their importance in maintaining a viable population. The final step was an analysis of conflict resolvability.

The draft categorization of tortoise habitat on the Arizona Strip is shown on Map II-16. Categories 1, 2, and 3 follow the formula found in the Rangewide Plan and the Arizona Implementation Strategy.

These are preliminary categories that could be redefined as future surveys and monitoring improve our understanding of tortoise populations. An evaluation of tortoise habitat condition and trend was not included here. This evaluation should become one of the highest priorities of tortoise management and the results incorporated as they become available. The Bureau will not downgrade areas based on changes which are a result of permitted activities. Changes will be made only as a result of improved information and not as a means of avoiding conflicts. Information gained from future work such as transects, study plots, and habitat evaluations will continue to provide more information for better habitat management.

CATEGORY I AREAS

Area 1: Beaver Dam Slope. This area includes habitat north of the Virgin River between the Paiute-Beaver Dam Wilderness Area and Beaver Dam Wash. Hohman and Ohmart (1978) determined that population densities ranged from 25 to 50 per sq. mile. Duck and Snider (1987) found similar densities. This area is important to maintaining a viable population along the entire Beaver Dam Slopes, including the Critical Habitat Area. When combined with the proposed Utah Category 1 area along the Beaver Dam Slopes a continous area of 46,600 acres will be designated in Utah and Arizona. This area contains 2 tortoise study plots in Arizona.

This area is bounded on the east by the 3800 ft contour line in the Beaver Dam Mountains. The Paiute-Beaver Dam Wilderness Area provides a high level of protection to tortoise habitat within the wilderness and buffers the east edge of this Category 1 area. The southern boundary of the Category 1 area is the conflict resolvability line drawn around the Virgin River. Private and county lands along the river have been excluded from Category 1 designation. The west edge is formed by the manageability line drawn around the agricultural and urban development in Beaver Dam Wash. The north boundary is the Arizona-Utah border.

APPENDIX 16 (CONTINUED)
DESERT TORTOISE HABITAT CATEGORIZATION
ARIZONA STRIP DISTRICT

Area 2: Mosby Nay. Sheppard and Duck transects indicate that the highest densities in the Pakoon Basin are along the Arizona/Nevada border south of Whitney Ridge. This area is important to maintaining a viable population in the adjacent Gold Butte (Nevada) Crucial Area which has been mentioned as a candidate for Category 1 designation.

The west boundary of the area is the Arizona-Nevada border, the southern boundary is the Lake Mead National Recreation Area, the east boundary is a large north-south ridge (actually it's an upthrust block) called the Cockscomb, while the north boundary location runs between concentrations of high and low transect values.

CATEGORY II AREAS

Area 3: Beaver Dam West. Estimates of tortoise densities are based on transects conducted by Sheppard and Duck and range from 0 to near 50 per square mile. The area has few conflicts and is important to the viability of the Mormon Mountains and Beaver Dam Slopes tortoise populations. The area is adjacent to proposed Category 2 habitat in Utah and Nevada.

The west boundary is the Arizona-Nevada border; the north boundary is the Arizona-Utah border; the east boundary is Beaver Dam Wash; and the south boundary is a conflict-manageability line 1/2 mile north of state land and along I-15.

Area 4: Lower Virgin Slopes. Although transects are notoriously poor methods of determining trend, there are significant decreases in the values of transects run by Sheppard in 1980-1982 and Duck in 1986-1988. This population has been effectively separated from other populations in the area by the Virgin River and I-15. The small size may prove to be inadequate to support a viable population, yet there are tortoises in sufficient numbers now to warrant protection. Some gene exchange may occur between tortoises here and those on the Beaver Dam Slopes and in the Gold Butte Crucial Area, although it has been reduced.

Area 5: Tank Wash. Fires in the Pakoon Basin have drastically altered the vegetation composition from a creosote shrub-joshua tree community to an (exotic) annual grassland within the past 10 years. This area remains as the best refuge in the Pakoon Basin east of the Mosby Nay Category 1 area. This is a prime candidate for redelineation to include the remaining unburned tortoise habitat.

Area 6: Cedar Wash. This area has lower densities than the Beaver Dam Slope, yet is important due to the fact it is adjacent to the slope. Conflicts here are very manageable due to the wilderness designation.

CATEGORY III AREAS

Area 7: Beaver Dam. Tortoise densities have declined to near zero due to increasing urban and agricultural development near Beaver Dam, Arizona, and along Beaver Dam Wash. Much of this area is owned privately, and the conflicts are difficult to resolve.

Area 8: Littlefield. Situation very similar to Areas 6 and 8.

Area 9: Windy Acres. A large increase in the development of private lands in this area was followed by substantial decreases in densities. Urban development is associated with OHV activity, collecting, vandalism, and other forms of habitat deterioration. Tortoise here have been isolated from the Beaver Dam population by the Virgin River and I-15.

Area 10: Upper Virgin Slopes. Poor denning due to soils and high water flows have kept densities low (5-10/sq. mile). Some of the area is within the Paiute Wilderness Area which affords a high level of protection.

APPENDIX 16 (CONTINUED)
DESERT TORTOISE HABITAT CATEGORIZATION
ARIZONA STRIP DISTRICT

Area 11: Pakoon. A large area of low-to-moderate densities. Fires have substantially reduced the value of the habitat and reduced tortoise population densities. There are very few conflicts in this area because of the remoteness. Livestock grazing and recreation are the only activities in the area (other than fires).

DRAFT DESERT TORTOISE HABITAT CATEGORY AREAS ON THE ARIZONA STRIP DISTRICT

Area No.	Area Acres*	Population Density	Population Trend	Conflict Resolvability	Importance To Viable Population	Category Assigned
1	19,800	20 - 50	St/De	High	High	1
2	17,500	20 - 50	St/De	High	High	1
3	27,000	0 - 50	Unk	High	High	2
4	23,650	20 - 50	Unk	High	Low	2
5	5,700	20 - 50	Unk	High	Mod	2
6	10,400	0 - 50	Unk	High	High	2
7	7,500	0 - 20	De	Low	Low	3
8	21,000	0 - 20	De	Low	Low	3
9	11,250	0 - 20	De	Low	Low	3
10	20,800	0 - 20	Unk	High	Low	3
11	172,000	0 - 50	De	High	Mod	3

St = Stable
De = Decreasing

* = desert tortoises per square mile
Unk = Unknown

Total Area Category 1 = 37,300 acres
Total Area Category 2 = 56,350 acres
Total Area Category 1 and 2 = 93,650 acres
Total Area Category 3 = 295,300 acres
Total Area Category 1, 2 and 3 = 388,950 acres

All acreages derived from BLM GIS system.

APPENDIX 17
ROS SETTING DESCRIPTIONS

ROS CLASSES	PHYSICAL SETTING	SOCIAL SETTING	MANAGERIAL SETTING
Primitive (P):	Area is characterized by essentially unmodified natural environment of fairly large size.	Concentration of users is very low and evidence of other users is minimal.	The area is managed to be essentially free from evidence of human-induced restrictions and controls. Only facilities essential for resource protection are used. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts between groups. Motorized use within the area is not permitted.
Semi-Primitive Non-motorized (SPNM):	Area is characterized by a predominantly unmodified natural environment of moderate to large size.	Concentration of users is low, but often other area users are evident.	On-site controls and restrictions may be present but are subtle. Facilities are provided for the protection of resource values and the safety of users only. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is not generally permitted unless otherwise designated.
Semi-Primitive Motorized (SPM)	Same as Semi-Primitive Non-motorized	Same as Semi-Primitive Non-motorized	Same as Semi-Primitive Non-motorized; except that motorized use is permitted.
Roaded Natural (RN):	Area is characterized by a generally natural environment. Resource modification and utilization practices are evident.	Concentration of users is low to moderate with facilities sometimes provided for group activity. Moderate evidence of the sights and sounds of humans.	On-site controls and restrictions offer a sense of security. Rustic facilities are provided for user convenience as well as for safety and resource protection. Conventional motorized use is provided for in construction standards and design of facilities.
Rural (R):	Area is characterized by a substantially modified natural environment. Resource modification and utilization practices are evident.	Concentration of users is often moderate to high. The sights and sounds of humans are readily evident.	Many facilities are designed for use by large numbers of people. Facilities are often provided for specific activities. Developed sites, roads, and trails, are designed for moderate to high use. Moderate densities are provided far away from developed sites. Facilities for intensive motorized use are available.
Urban (U):	Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soil may be protected by surfacing.	Large numbers of users can be expected. The sights and sounds of humans, on-site, predominate.	Modern facilities are provided for the use and convenience of large groups. Controls and restrictions are obvious and numerous. Facilities for high intensity motor use and parking are present with forms of mass transit often available.

APPENDIX 18
WILD & SCENIC RIVERS
ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

STUDY PROCESS

The wild and scenic river study process has three steps:

(1) Determine if the river segment(s) are eligible for Wild and Scenic River designation.
(2) Determine the potential classification of the river segment(s) as wild, scenic, recreational, or any combination thereof.
(3) Conduct a suitability study/legislative EIS to determine if the river segment(s) is suitable for designation to the Wild and Scenic Rivers System.

Specific study procedures are found in BLM Manual 8351 and in the final revised U.S. Departments of Agriculture and Interior guidelines found in Federal Register Vol. 7, No. 173, September 7, 1982. The guidance recommends that all three steps be completed during the RMP process. However, if circumstances make this impossible, the study/EIS step may be deferred for up to 5 years. Minimum determinations in an RMP involving a potential wild and scenic river must include decisions on eligibility and classification.

Because of the RMP schedule, funding limitations and coordination requirements involving three BLM districts in three states (Utah, Arizona and Nevada), the Arizona Strip District has elected to defer the suitability study for the Virgin River. This appendix completes the first two steps of the process for the Virgin River and all three steps for the Paria River as required by BLM guidance.

The suitability study/legislative EIS for the Virgin River will be a joint effort involving the BLM Cedar City District, Utah, the BLM Las Vegas District, Nevada and the Arizona Strip District.

STUDY CRITERIA

To be eligible for inclusion in the national system, a river segment must be free-flowing, and the river and its adjacent land area must possess at least one outstandingly remarkable value. There are no specific requirements regarding the length or flow of an eligible river segment. Length and flow are sufficient if they sustain or complement the outstandingly remarkable values for which the river would be designated. The minimum study corridor includes the river and the adjacent lands to 0.25 mile from the river's edges. A wider corridor may be studied if inclusion could facilitate resource management in the river area. If a river segment is determined to be noneligible during the planning process, further study should be discontinued. Planning records must document the basis for the noneligibility determination.

A river segment's potential classification depends on the condition of the river and adjacent lands as they exist at the time of the study. The Wild and Scenic Rivers Act specifies three classifications for eligible rivers: wild, scenic and recreational.

- To be classified wild, a river segment must be free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.

- To be classified scenic, a river segment must be free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. The area must not show substantial evidence of human activity.

- To be classified recreational, a river segment may be readily accessible by road or railroad, may have some development along the shoreline and may have undergone some impoundment or diversion in the past.

INTERIM MANAGEMENT

BLM guidance provides for interim protection of a river segment after it has been determined eligible and subsequently classified as wild, scenic, and/or recreational. Management activities will not be allowed to damage the

APPENDIX 18 (CONTINUED)
WILD & SCENIC RIVERS
ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

existing eligibility, classification, or suitability. Outstandingly remarkable values of the river area must be protected, and to the extent practicable, enhanced. The free-flowing characteristics of the river segment cannot be modified.

VIRGIN RIVER OVERVIEW

The following sections address the eligibility and classification steps of a study on the Virgin River in Arizona for potential Wild and Scenic River designation. The river was on the 1982 National Rivers Inventory but was later removed from that list. However, public interest expressed during the RMP process indicated that the river should be studied for potential designation.

INTRODUCTION

The Virgin River flows through three states, originating north and east of Zion National Park and flowing through southwestern Utah, the Virgin River Gorge in Arizona, and finally into Lake Mead in Nevada. The total river segment covers 76 miles, from just above Hurricane, Utah to Lake Mead. This eligibility and classification determination covers only the 35-mile section in Arizona. This section has been determined eligible for potential inclusion into the Wild and Scenic Rivers System. The Arizona section was split into four potential classifications: segment 1 - wild; segment 2 - scenic; segment 3 - recreational; segment 4 - recreational.

Although the river was removed from the National Rivers Inventory (NRI), the values for which it was originally included are considered in this eligibility and classification process. The Virgin River was identified as having outstandingly remarkable scenic, geologic, fisheries and wildlife values.

ADMINISTRATION

The Arizona section of the Virgin River has been determined non-navigable. Therefore, the riverbed, use on the river, and the area within the corridor included in this study are controlled by the landowner. Of the approximately 35 miles of river in Arizona, 28.5 miles are under BLM administration, 6 miles are privately owned and 0.5 mile is state owned.

RIVER DESCRIPTION

The river cuts through an area of extreme geologic faulting and folding, exposing numerous layers of the earth's crust and providing spectacular scenery. The river also is habitat for the woundfin minnow, an endangered species, and the Virgin River chub, a threatened species. Additionally, the Virgin River provides a unique riparian corridor through the otherwise arid region and is, therefore, an important water source for a variety of wildlife, including the desert bighorn sheep, recently reintroduced into the area.

The river corridor to be studied consists of the river itself and a strip of land 0.25 mile from the high water mark on each side of the river. This corridor starts where the river crosses the Utah-Arizona state line and ends where it crosses the Arizona-Nevada state line. The 35-mile-long section has been divided into four segments:

(1) Utah-Arizona state line (Mile 0) to the first I-15 bridge (approximately 3 river miles).
(2) First I-15 bridge to the Virgin River Campground (approximately 9 river miles).
(3) Virgin River Campground to the mouth of the Virgin River Gorge (approximately 7 river miles).
(4) Mouth of the gorge to the Arizona-Nevada state line (approximately 15 river miles).

Segment 1

This stretch of the Virgin River is entirely within the Beaver Dam Mountains Wilderness. The wilderness extends north into Utah 2.1 miles along the Virgin River Gorge.

APPENDIX 18 (CONTINUED)
WILD & SCENIC RIVERS
ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

The segment runs through a rugged canyon with walls from 300 to 500 feet high. Access is possible only by foot or horseback from the bridge on I-15 or by floating the river down from Utah. There is no shoreline development and human evidence is limited to three fencelines that come down to the water's edge and one small corral that is no longer in use. Scenic and geologic features are outstanding. The shoreline consists of narrow strips of sandy beaches. Riparian vegetation such as tamarisk, willow and cottonwood, is somewhat sparse due to periodic flooding from spring runoff and summer thunderstorms.

Segment 2

This segment flows through high quality scenery although the scenic quality is lowered somewhat by proximity to I-15 at four different points where talus slopes from highway construction form the riverbank. Legal recreation access along this segment is limited to the Virgin River Campground.

Segment 3

This segment includes the river corridor from the Virgin River Campground to the mouth of the gorge and lies mostly within the I-15 highway right-of-way. While it provides some of the best river running challenges and is in the narrowest, most precipitous part of the gorge, it nevertheless has been affected greatly by the highway. The river flows under four bridges, and it is along this stretch that most of the 12 river diversions occurred during construction.

Segment 4

The fourth segment flows through a gently rolling, somewhat incised alluvial fan, with sandy shorelines and more riparian vegetation than canyon segments. There are several access points scattered along the shoreline, human developments (houses and agricultural fields) are visible, and a small diversion dam near the Arizona-Nevada state line feeds water to fields.

ELIGIBILITY

The river meets the definition of a free-flowing stream from the Utah-Arizona state line to the Arizona-Nevada state line. Segments 1 and 2 have outstandingly remarkable scenic, geologic, aquatic and riparian values. Segments 3 and 4 have outstandingly remarkable aquatic and riparian values. Therefore, all four segments are determined eligible for inclusion in the Wild and Scenic Rivers System.

POTENTIAL CLASSIFICATION

Segment 1 meets the wild criteria, being free of impoundments, generally inaccessible except by trail, with shorelines essentially primitive and waters unpolluted. Segment 2 meets the scenic criteria. It is also free of impoundments and generally inaccessible except by trail. However, shoreline disturbance from highway construction is apparent at several points. Segment 3 meets the recreational but not the scenic criteria due to the bridges and river channel modifications. Segment 4 meets the recreational criteria, with several access points and noticeable human developments.

INTERIM MANAGEMENT

Interim management for the Virgin River will require that the potential classifications as determined in this RMP be considered when an action is proposed that may affect these classifications. Especially important is segment 4 from the mouth of the Virgin River Canyon to the Arizona-Nevada state line because of the human population growth and related demands on natural resources. Upstream from the canyon mouth, the river is protected by wilderness designation and a scenic withdrawal.

APPENDIX 18 (CONTINUED)
WILD & SCENIC RIVERS
ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

PARIA RIVER OVERVIEW

The following sections address the eligibility, classification, and suitability steps of a study on the Paria River in Arizona for potential Wild and Scenic River designation. The examined river segment runs some 28 miles from the Arizona-Utah state line to the boundary of Glen Canyon National Recreation Area near Lees Ferry. The river was on the 1982 National Rivers Inventory.

INTRODUCTION

The Paria River flows through two states, originating in Bryce Canyon National Park and flowing through south-central Utah, the Paria River Canyon in Utah and Arizona, and finally into the Colorado River at Lees Ferry, Arizona. The total river segment covers 92 miles, from its source at Bryce Canyon, Utah to its mouth at Lees Ferry. This eligibility, classification, and suitability determination covers only the 28-mile section in Arizona within the wilderness. This section has been determined eligible and suitable for a Wild and Scenic River designation with a potential classification as wild and scenic.

The Paria River was identified as having outstandingly remarkable scenic, recreational, geologic, fisheries and cultural values.

ADMINISTRATION

The Arizona section of the Paria has been determined non-navigable. Therefore, the riverbed, use on the river, and the area within the corridor included in this study are controlled by the landowner. Of the approximately 31 miles of river in Arizona, 28 miles are under BLM administration, and 3 miles are under NPS administration.

RIVER DESCRIPTION

The river cuts through an area of significant geologic uplift and with associated faulting, exposing numerous layers of the earth's crust and providing spectacular scenery. The river provides habitat for the speckled dace, bluehead mountain sucker, flannel mouth sucker and razorback sucker. Additionally, the Paria River provides a unique riparian corridor through the otherwise arid region and is, therefore, an important water source for a variety of wildlife, including deer and the desert bighorn sheep, recently reintroduced into the area.

The river corridor to be studied consists of the river itself and a strip of land 0.25 mile from the high water mark on each side of the river. This corridor starts where the river crosses the Utah-Arizona state line and ends where it enters the Glen Canyon National Recreation Area.

This segment of the Paria River is entirely within the Paria Canyon-Vermillion Cliffs Wilderness. The wilderness extends north into Utah 4 miles along the Paria River and west some 9 miles along Buckskin Gulch--a tributary to the Paria.

The segment runs through a rugged and often narrow canyon with walls up to 600 feet high then gradually opens to 2 1/2 miles wide and 2,600 feet deep. Access is possible only by foot or horseback from four trailheads outside the wilderness--three in Utah and one at Lees Ferry. Recreational use of the river typically includes hiking, backpacking and some horseback riding. River rafting or floating is generally not done due to low water and hazards.

Shoreline development is non-existent, and human evidence is limited to the remains of a ranch site, several deteriorating roads (constructed for uranium exploration in the 1950s), a small corral and an abandoned water pump. Most of these evidences are historic in nature. Scenic and geologic features are outstanding. The shoreline consists primarily of narrow strips of sandy, wooded terraces, although in the upper canyon the shorelines become sheer canyon walls. Riparian vegetation, such as tamarisk, willow, box elder and cottonwood, grows along the shorelines below the Narrows of the Paria.

APPENDIX 18 (CONTINUED)
WILD & SCENIC RIVERS
ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

ELIGIBILITY

The river meets the definition of a free-flowing stream from the Utah-Arizona state line to Glen Canyon National Recreation Area. It has outstandingly remarkable scenic, geologic, recreational, cultural and riparian values. Therefore, this river segment is determined eligible for inclusion in the Wild and Scenic Rivers System.

POTENTIAL CLASSIFICATION

The subject segment meets the wild criteria, being free of impoundments, generally inaccessible except by trail, with shorelines essentially primitive and waters unpolluted.

SUITABILITY

The studied segment is determined to be suitable for potential designation as a Wild and Scenic River. The outstandingly remarkable scenic, recreational, geologic, fisheries, and cultural values along the river corridor make the Paria River a deserving potential addition to the Wild and Scenic Rivers System. The entire study segment is on public land administered by the BLM and managed and protected as wilderness. No private or state lands encumber this situation. Other compatible programs, such as wildlife and range management, occur in the study area. Wildlife programs in particular contribute to the outstanding values of the area with the management of bighorn sheep and deer. Additionally, the Paria River Canyon provides habitat for the peregrine falcon. Much of the study segment includes somewhat diverse riparian habitat, which is rare in this part of Arizona.

Designation of the study segment would add to the existing protection provided by statutory wilderness by contributing to the maintenance or perhaps enhancement of opportunities for visitors to view and enjoy the outstanding values mentioned. Riparian systems and wildlife could also benefit by a greater assurance of water availability. Designation could increase the level of protection above that of wilderness in that off-wilderness issues potentially affecting the free-flowing nature of the river could justifiably be addressed. Non-designation would not greatly diminish protection of the Paria River except in the ability to address upstream, off-wilderness issues potentially impacting its free-flowing nature.

Little public interest, either support or opposition, has been expressed concerning the study of the Paria River for potential designation as a Wild and Scenic River. Existing wilderness designation and the relative obscurity of this issue are probable reasons for the lack of interest. The BLM Kanab Resource Area (upstream) and Glen Canyon National Recreation Area (downstream) have supported potential designation for the study segment.

Administration of the study segment as a designated Wild and Scenic River should not involve a significant increase in costs. Management of the wilderness area and the parallel nature of protection provided by both types of designations would keep costs of administration to a minimum. Since there are no private or state lands involved, there is no need for land acquisition funds.

The Arizona Strip District of the BLM has managed the Paria Canyon-Vermillion Cliffs Wilderness for 5 years. Managing the Paria River as a Wild and Scenic River would go together well with managing for the protection, preservation and public use of wilderness values.

INTERIM MANAGEMENT

Interim management for the Paria River will require that the potential classifications as determined in this document be considered when an action is proposed that may affect these classifications. Especially important is the upper drainage in Utah between Bryce Canyon National Park and U.S. Highway 89 because of scattered agricultural lands and the potential their use poses for pollution. Downstream from the highway, the river is protected by wilderness designation.

APPENDIX 19
OFF-HIGHWAY VEHICLE DESIGNATIONS

DEFINITION:

1. "Off-highway vehicle"- any motorized vehicle capable of, or designed for, travel on or immediately over land or other natural terrain, excluding: (1) any military, fire, search and rescue, or law enforcement vehicle while being used for emergency purposes; (2) any vehicle use expressly approved by the authorized officer; (3) vehicles in official use; and (4) any combat or combat support vehicle when used in times of national defense emergencies.

2. "Official use"- use by an employee, agent, or designated representative of the federal government or one of its contractors, in the course of carrying out required duties.

3. "Trail"- an unmaintained road, such as a 4-wheel-drive trail, consisting of two parallel tracks.

4. "Open area"- an area where motorized vehicle use is permitted both on and off road.

5. "Closed area"- an area where motorized vehicle use is prohibited. Use of vehicles in closed areas may be approved by the authorized officer for special purposes or legal requirements. Wilderness areas are closed.

6. "Limited to existing roads and trails"- motorized vehicle use permitted on all roads and trails in the area unless otherwise signed as closed. Motorized vehicle use is not permitted on roads and trails that have been physically closed through reclamation actions. Some off-road travel may be permitted (see Strategies/Guidelines).

7. "Limited to designated roads and trails"- motorized vehicles permitted only on roads or trails that have been identified as open on a district map. Roads and trails not identified as open are closed to all motorized use and will be signed as closed on the ground. Off-road travel is prohibited unless prior approval has been granted by the authorized officer (see Strategies/Guidelines).

8. "Limited to seasonal use"- motorized vehicle use is regulated by the time of year that specific management prescription apply.

9. "Off-road"- any motorized vehicle use not on an existing road or trail. This refers to cross-country travel.

MANAGEMENT STRATEGIES/GUIDELINES:

A. Limited to existing roads or trails- BLM will not prepare an activity plan/map for these areas. All authorized public land users that hold a permit or license (i.e., grazing permittees, wood permits, hunting license, rights-of-way holders, mining claim, etc.) may drive off-road if required to fulfill requirements of their permit or license. Motorized vehicles must park within 100 yards of an existing road or trail for camping.

B. Limited to designated roads or trails- BLM will prepare an activity plan and a map for each area that will identify the specific roads that are open. These plans and maps will be circulated for public review as they are prepared. Specific requests and approval by the authorized officer is required prior to most off-road vehicle use in these areas. Hunters may not use motorized vehicles off the designated roads to retrieve an animal. Vehicle parking must be within 50 feet of the designated roads.

C. Once the RMP is finalized, all areas classified as "limited to designated roads and trails" will be managed as "limited to existing roads and trails" until a specific activity plan and map are prepared.

D. All off-road vehicle use must be limited to the minimum necessary in order to accomplish the task and to prevent undue or unnecessary degradation to the area.

E. Organized events, timber harvesting, and land treatment projects will be handled on a case-by-case basis.

F. Emergency services and/or law enforcement activities are exceptions to these policies.

APPENDIX 20
VISUAL RESOURCE MANAGEMENT CLASSES

OVERVIEW

The purpose of this appendix is to describe the process by which visual resources are classified and the visual impacts of proposed projects are assessed. Visual resource management is an analytical process that identifies and sets objectives for maintaining scenic values and visual quality. The objectives are used by management along with other resource values in determining the best use of public lands. Public lands within the Arizona Strip District have been inventoried and placed into visual resource Management (VRM) classes.

VRM CLASSES

After classification as to scenic quality, visual sensitivity, and distance zones, areas are assigned to one of five management classes. These management classes establish objectives for maintaining or enhancing an area's visual quality. The VRM classes are established through the RMP process.

A brief summary of objectives for the visual resource management classes are:

Class I: This class is given to lands which have a special designation already in place for the protection of scenic values. Examples are areas which have been designated as wilderness or natural areas. Class I objectives allow for only natural ecological changes.

Class II: Areas that have a high scenic quality and where people are highly sensitive to changes in the scenery are given a Class II rating. Changes to the landform, vegetation or structures should be done very subtly. Proposed changes may be seen, but should not attract attention.

Class III: Scenic quality of lands with this classification may be good to very good, but when combined with other factors of how sensitive people are to changes and viewing distances, the overall class rating wasn't high enough to warrant the objectives of Class II. Management activities which affect the scenery should be designed or restricted so they are not obviously in contrast to the existing landscape.

Class IV: These lands in comparison to others in the region, are fairly mundane, with similar-looking vegetation and little change in landform. People are generally less sensitive to changes here. Proposed projects or management activities may occur here and obviously be in contrast to the landscape. However, mitigation is still required to reasonably reduce any unnecessary degradation of scenic quality.

Class V: This classification is applied to the specific areas where the landscape has been disturbed to the point that rehabilitation is required to bring it up to the surrounding area's class. It is used as an interim classification until objectives of another class can be reached. An example would be the route of a powerline in a Class II area or a landfill site.

APPENDIX 21
LEGAL VEHICULAR ACCESS ACQUISITION

Legal access would be required across private and state lands for administrative and public vehicular use on the following roads:

1. House Rock - T38N, R4E, Section 7, SE1/4 - 1/2 mile
2. Mt. Trumbull - T35N, R8E, Section 15, S1/2 SE1/4; Section 14, S1/2 SW1/4 - 1 mile
3. Toroweap Valley - T35N, R7W, Section 20, S1/2 - 3/4 mile
4. Cane Beds - T41N, R6W, Section 15 - 1 mile
5. Parashant Canyon - T41N, R5W, Section 8, S1/2 S1/2 - 1/2 mile
6. Rosy Canyon - T41N, R5W, Section 18, NE1/4 NE1/4; Section 17, NW1/4 NW1/4 - 1/2 mile; T41N, R5W, Section 18, S1/2 S1/2; Section 17, SW1/4 SW1/4; Section 20, NE1/4 NW1/4 - 1 mile
7. Beaver Dam - T40N, R15W, Section 4, NW1/4 NW1/4 - 1/4 mile
8. Littlefield - T40N, R15W, Section 4, SW1/4 SE1/4 - 1/4 mile
9. Virgin River - T40N, R15W, Section 9, E1/2 NW1/4, NE1/4 SW1/4 - 3/4 mile
10. Bundyville - T35N, R10W, Sections 26 & 27, S1/2 S1/2 - 3 miles
11. Whitmore Point - T34N, R10W, Section 35 - 1 mile; T33N, R10W, Section 1 - 1 mile; T33N, R9W, Section 7 - 1.5 miles
12. Wildcat - T33N, R12W, Section 21, SE1/4 SE1/4; Section 27; Section 35, N1/2 - 2.5 miles
13. Penn Valley - T32N, R11W, Section 6, W1/2; Section 7, NE1/4 NW1/4 - 1.5 miles
14. LeFevre Canyon - T40N, R1E, Sections 28 & 33 - 2 miles
15. Lost Spring Mountain - T41N, R7W, Sections 20, 29 & 34 - 2 miles
16. Lyons Point - T41N, R6W, Section 13 - 1/2 mile



APPENDIX 22
MINERAL POTENTIAL CLASSIFICATION SYSTEM*

I. LEVEL OF POTENTIAL

O The geologic environment, the inferred geologic processes; and the lack of mineral occurrences do not indicate potential for accumulation of mineral resources.

L The geologic environment and the inferred geologic processes indicate low potential for accumulation and preservation of mineral resources.

M The geologic environment, the inferred geologic processes, and the reported occurrences or valid geochemical / geophysical anomaly indicate moderate potential for accumulation and preservation of mineral resources.

H The geologic environment, the inferred geologic processes, the reported mineral occurrences and/or valid geochemical/geophysical anomaly, and the known mines or deposits indicate high potential for accumulation of mineral resources. The "known mines and deposits" do not have to be within the area that is being classified, but have to be within the same type of geologic environment.

ND Mineral(s) potential not determined due to lack of relevant data. The notation does not require a level-of-certainty qualifier.

II. LEVEL OF CERTAINTY

A The available data are insufficient and/or cannot be considered as direct or indirect evidence to support or refute the possible existence of mineral resources within the respective area.

B The available data provide indirect evidence to support or refute the possible existence of mineral resources.

C The available data provide direct evidence but are quantitatively minimal to support or refute the possible existence of mineral resources.

D The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

For the determination of No Potential use O/D. This class shall be seldom used, and when used it should be for a specific commodity only. For example, if the available data show that the surface and subsurface type of rock in the respective area is batholithic (igneous intrusive), one can conclude, with reasonable certainty, that the area does not have potential for coal.

*As used in this classification, "potential" refers to potential for the presence (occurrence) of a concentration of one or more energy and/or mineral resources. It does not refer to or imply potential for development and/or extraction of the mineral resource(s). It does not imply that the potential concentration is or may be economic.

APPENDIX 23
DETERMINATION OF EROSION CONDITION CLASS
SOIL SURFACE FACTORS (SSF)

	Stable	Slight	Moderate	Critical	Severe
SOIL MOVEMENT	No visual evidence of movement 0 1 2 3	Some movement of soil particles 4 5	Moderate movement of soil is visible and recent. Slight terracing generally less than 1" high 6 7 8	Occurs with each event. Soil and debris deposited against minor obstructions 9 10 11	Subsoil exposed over much of area, may have embryonic dunes and wind-scoured depressions 12 13 14
SURFACE LITTER	Accumulating in place 0 1 2 3	May show slight movement 4 5 6	Moderate movement is apparent, deposited against obstacles 7 8	Extreme movement apparent, large and numerous deposits against obstacles 9 10 11	Very little remaining 12 13 14
SURFACE ROCK	If present, the distribution of fragments show no movement caused by wind or water 0 1 2	If present, coarse fragments have a truncated appearance or spotty distribution caused by wind or water 3 4 5	If present, fragments have a poorly developed distribution pattern caused by wind or water 6 7 8	If present, surface rock or fragments exhibit same movement and accumulation of smaller fragments behind obstacles 9 10 11	If present, surface rock or fragments are dissected by rills and gullies or are already washed away 12 13 14
PEDESTALLING	No visual evidence of pedestalling 0 1 2 3	Slight pedestalling, in flow patterns 4 5 6	Small rock and plant pedestals occurring in flow patterns 7 8 9	Rocks and plants on pedestals generally evident, plant roots exposed 10 11	Most rocks and plants pedestalled and roots exposed 12 13 14
FLOW PATTERNS	No visual evidence of flow patterns 0 1 2 3	Deposition of particles may be in evidence 4 5 6	Well-defined, small, and few with intermittent deposits 7 8 9	Flow patterns contain silt and sand deposits and alluvial fans 10 11 12	Flow patterns are numerous and readily noticeable. May have large barren fan deposits 13 14 15
RILLS	No visual evidence of rills 0 1 2 3	Some rills in evidence at infrequent intervals over 10' 4 5 6	Rills 1/2" to 6" deep occur in exposed places at approximately 10' intervals 7 8 9	Rills 1/2" to 6" deep occur in exposed area at intervals of 5' to 10' 10 11 12	May be present at 3" to 6" deep at intervals less than 5' 13 14
GULLIES	May be present in stable condition. Vegetation on channel bed and side slopes 0 1 2 3	A few gullies in evidence which show little bed or slope erosion. Some vegetation is present on slopes 4 5 6	Gullies are well developed with active erosion along less than 10% of their length. Some vegetation may be present 7 8 9	Gullies are numerous and well-developed with active erosion along 10 to 50% of their lengths or a few well-developed gullies with active erosion along more than 50% of their length 10 11 12	Sharply incised gullies cover most of the area and over 50% are actively eroding 13 14 15

EROSION CONDITION CLASSES: Stable 0-21; Slight 21-40; Moderate 41-60; Critical 61-80; Severe 81-100

APPENDIX 24
CATEGORY 2 CANDIDATE SPECIES

SPECIAL STATUS PLANTS

The sensitive species, those listed under the Fish & Wildlife Service's (FWS) Category 2, are being mapped, counted and monitored. These species are also protected as though under the Endangered Species Act (ESA) until enough is learned of them to determine management direction through the FWS' Plant Recovery Team.

The Category 2 species are:

Astragalus ampullarius, which has little information, as yet, gathered on it. Locations are known and this species occurs largely in Utah and comes down into Arizona on Cedar Ridge and the Kanab-Fredonia area, all of which are private and state lands. This species has not been found on BLM land on the Arizona Strip.

Astragalus holmgrenorium, which is being monitored, and as far as is known, occurs on two BLM sections of the Arizona Strip and overlaps largely into Utah.

Camissonia exilis, a rare annual, provides observers little time to study its biological parameters as it emerges only when environmental conditions are perfect. It has been found in the Jacob Ranch area and Coyote Valley area in the district.

Penstemon distans appears numerous and is currently being monitored to learn more of its cycles and what its threatened by both from nature and man's activities.

Psoralea epipsila. There exists a taxonomic question on this species. All taxonomists now identify the plant that occurs on the Arizona Strip as *Psoralea mephitica* rather than *epipsila*.

Rosa stellata is perhaps the rarest plant on the Arizona Strip and is being searched for, monitored, and protected. This variety of desert rose grows in breccia pipes along Kanab Canyon. However, a taxonomic description needs to be finalized on this variety of *Rosa stellata*. Grand Canyon National Park and Lake Mead National Recreation Area have a significant population.

Astragalus triquetrius. A specimen was found in 1940 in the Beaver Dam Wash area of the Arizona Strip. However, searches in recent years have been unsuccessful in locating specimens in the habitat. Brigham Young University has located specimens in neighboring Clark County, Nevada, but none in Arizona.

Astragalus cremnophylax var. *Myriorraphis*. This rare milkvetch grows on limestone ledges on the Kaibab Plateau. It has been located on the west side of the Buckskin Mountains in small, isolated areas.

APPENDIX 25
PRIORITY, ENDANGERED, THREATENED OR SENSITIVE WILDLIFE SPECIES ASSOCIATED WITH RIPARIAN AREAS

Name	Season	Priority Species	Significance	Occupies Specific Riparian Area?
Bald Eagle	Winter	No	Federal and State Endangered	No
Peregrine Falcon	Yearlong	Yes	Federal Endangered; State Candidate	No
Black Hawk	Summer	No	State Candidate	Beaver Dam Wash
Blue Grosbeak	Summer	No	Uncommon	No
Black-headed Grosbeak	Summer	No	Restricted habitats	No
Northern Oriole	Summer	No	Uncommon	No
Summer Tanager	Summer	No	Rare	No
Abert's Towhee	Summer	No	Rare	No
South Western Toad	Yearlong	No	Lack of information	No
Great Plains Toad	Yearlong	No	Hypothetical	No
Pacific Tree Frog	Yearlong	No	Restricted distribution	Middle Springs
Woundfin Minnow	Yearlong	Yes	Federal and State Endangered	Virgin River
Virgin River Chub	Yearlong	Yes	Federal and State Endangered	Virgin River
Razorback Sucker	Yearlong	Yes	Federal Candidate	Paria River
Virgin River Spinedace	Yearlong	No	State Endangered; Federal Candidate	Virgin River
Spotted Bat	Unknown	No	Federal and State Candidate	No
Belted Kingfisher	Rare	No	State Candidate	Virgin River
Willow Flycatcher	Summer	No	State Endangered	Virgin River
Grand Wash Spring Snail	Yearlong	No	Federal Candidate	Whiskey/Buckhorn/ Grapevine/Little Arizona
American Bittern	Uncommon	No	State Candidate	No
Western Snowy Plover	Uncommon	No	Federal and State Candidate	No

APPENDIX 26
SPECIAL STATUS PLANT SPECIES ARIZONA STRIP DISTRICT

Plants Species	Status**	Known Number of Plants	Esti-mated Total	Known Habitat Acres	# of Study Plot/Tag-ged Plants	Data Questions	Priority Species
Pediocactus sileri	Endangered	10,500	30,000-50,000	330,000	5/500+	Total population	Yes
Pediocactus bradyi	Endangered	600	7,000-8,000	11,000	5/600	Total population	Yes
Asclepias welshii	Threatened	582	Unknown	20	Photo plot	Total population	
Pediocactus peeblesianus var. *fickeiseniae*	Category 1	250	1,000-5,000	7,020	3/51	Distribution	Yes
*Pediocactus paradinei**	Category 1	Rare	Rare	2,000	None	-	Yes
Rosa stellata	Category 2	143 clumps	143 clumps	5	2/32 clumps	Number and distribution	No
Camissonia exilis	Category 2	85	Unknown	15	None	Number and distribution	No
Astragalus ampullarius	Category 2	Unknown	Unknown	Generally known	None	Number and distribution	No
Astragalus cremnophylax var. *myriorraphis*	Category 2	272	Unknown	Generally known	5 plots	Number and distribution	No
Penstemon distans	Category 2	7,500	50,000+	570-5,500	2/60	Number and distribution	No
Astragalus holmgrenorium	Category 2	Unknown	Unknown	1,280	1/100+	Distribution	No
Cirsium virginensis	Category 2	Unknown	Small	Generally known	None	Distribution	No
Astragalus geyeri var. *trigetetrus*	Category 2	Unknown	Unknown	Unknown	None	Not located	No

* As most occurs on U.S. Forest Service, that agency has studies on this cactus.
** U.S. Fish & Wildlife Service (FWS) is source.

See Appendix 21, Discussion on Candidate Plants.

Candidate Category 1 contains those species for which the FWS has sufficient information on hand to support their being listed as threatened or endangered. Category 1 species are likely to be proposed for listing in the foreseeable future and for that reason are included on species lists provided by us under Section 7 of the Act.

Candidate Category 2 contains species for which the FWS does not have sufficient information on hand to support their being listed as threatened or endangered at this time. The FWS is actively seeking information on these species to determine if they warrant inclusion in a different category. Category 2 species are not included on species lists provided under Section 7 because their eventual status is uncertain.

Candidate Category 3 contains three subcategories. Subcategory 3A contains species that are no longer being considered for listing as threatened or endangered because the species is extinct, subcategory 3B contains species not regarded as taxonomically valid, and subcategory 3C contains species more widespread or not subject to an identifiable threat. Any species in this category may be reevaluated if a change in condition warrants such, but they are not presently considered candidates for listing.

APPENDIX 27
SUMMARY OF PAST ACTIVITY AND PROJECTIONS FOR OIL & GAS DEVELOPMENT

Since no oil or gas has been produced from this area, it is difficult to know how much surface disturbance would occur as a result of field development. In order to assess the cumulative environmental effects of lease issuance, several assumptions will be made concerning both exploration and hypothetical development of oil and gas in the district. These assumptions are outlined as follows:

1. With the exception of wilderness areas, unleased areas would continue to be available for leases.

2. Geologic history, source rock, reservoir rock, thermal regemine, sealing and trapping are assumed to all be appropriate for hydrocarbon origination, migration, accumulation and preservation in the sedimentary rocks at depths within the district.

3. Any economically recoverable oil and gas accumulations occurring under leased lands would be developed.

4. Exploration would continue at the same rate it has since exploration began in 1909.

5. While exploration may occur throughout the district, development would occur only in those areas rated as having a moderate potential for hydrocarbon accumulation.

6. One oil or gas field would be developed during the life of the plan.

7. Disturbance associated with each well pad and access would average 8 acres.

8. Reclamation of disturbed areas would be successful and all reclamation would commence immediately following cessation of exploration operations or depletion of the resource. Reclamation, consisting of reshaping the surface, soil stabilization and reestablishment of vegetation would be completed within ten years.

9. Laws and regulations concerning the protection of other resource values including cultural resources and threatened or endangered plant and animal species would be complied with and would be effective.

Based on the above assumptions, one oil and gas exploration well would be drilled on the average of every two years in the district. This would result in approximately 8 exploration wells being drilled over the life of the plan. Surface disturbance resulting from this exploration would total approximately 65 acres within the entire district. Assuming that no production would be established from any of these exploratory wells, reclamation would be initiated immediately following exploration operations. Reclamation would be successful and all disturbed areas would be fully reclaimed within ten years of exploration operations.

For the purpose of this analysis, it is assumed that development of one oil or gas field would occur over the life of the plan. Oil fields in the immediate vicinity of the Arizona Strip District include the Virgin and Upper Valley fields. The Virgin oil field is not a good analog for oil field development because production from each well was so low (1-2 bbl/day) and so many wells were needed for production for the size of the area (250 wells/2,400 acres), that a field of this type could not be developed under current economic conditions. The Upper Valley field, in contrast, is a more realistic analog of the type of field development which may be expected on the Arizona Strip District. In this field, 3,350 acres have been proven productive. Development consists of 25 development wells. This equates to approximately one well per 130 acres.

While no direct connection is inferred between this field and hydrocarbon accumulations which may underlie the district, the Upper Valley is an example of field type and size. Assuming a field size of 3,500 acres and an average well spacing of 80 acres, approximately 44 wells would be required to develop the hypothetical field. Assuming 8 acres disturbed per well, approximately 350 acres would be disturbed through field development.

APPENDIX 28
IMPACTS FROM REASONABLY FORESEEABLE LOCATABLE MINERAL RESOURCE EXPLORATION AND DEVELOPMENT

REASONABLY FORESEEABLE ACTIVITY:

1. Uranium (FY 1990-2005, 16 years)

Exploration

For the purposes of this analysis, it is assumed that uranium resource exploration will continue in areas showing high favorability of occurrence. The exploration rate is also expected to continue at the same rate it has over the past 9 years.

# cases with activity	688	cases
# acres disturbed by exploration	430	acres
# acres disturbed by exploration access	310	acres
# acres disturbed by exploration (total)	740	acres

Development

Uranium resource development is expected to occur in areas of high uranium resource potential and no extensive overburden of volcanic or sedimentary rock which would significantly complicate exploration. For analysis purposes it is assumed that one new underground mine would be proposed each year over the life of the plan. Each mine would be in a development stage for approximately 2 years, production for 7 years, and reclaimed within 1 year of depletion of the ore body.

# mine yard acres	240	acres
# upgraded access acres (mi)	180	acres (60)
# new access acres (mi)	30	acres (7)
# powerline acres (mi)	100	acres (80)
# total acres	550	acres

2. Gypsum (FY 1990-2005, 16 years)

For the purposes of this analysis, it is assumed that all exploration for and development of gypsum would be confined to those areas of high favorability for the occurrence of the resource located in the vicinity of T. 41 N., R. 11 and 12 W. This is due to the surface exposure of gypsum in this area and nearby availability of power and a transportation network. Exploration and development is expected to occur at the same rate it has over the past eight years.

# cases with activity	16	cases
# acres disturbed (exploration, mining, access)	60	acres

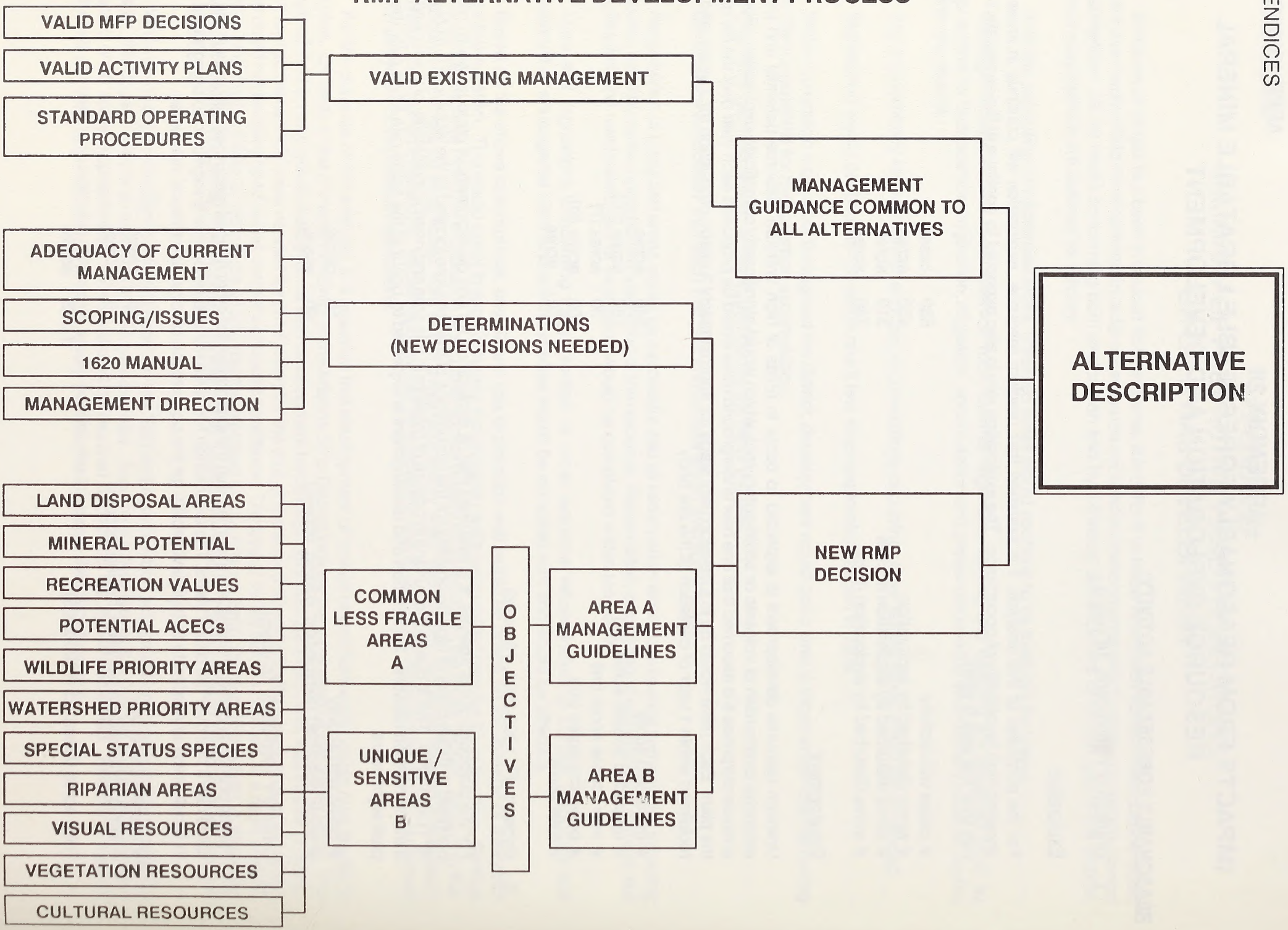
3. Other (FY 1990-2005, 16 years)

For the purposes of this analysis, it is assumed that the exploration for other mineral resources will occur at the same rate it has over the past 8 years. The exploration for these mineral resources is expected to be confined to those areas of moderate to high favorability for the occurrence of locatable mineral resources.

# cases with activity	16	cases
# acres disturbed (exploration, mining, access)	5	acres

4. Total acres disturbed (1990-2005) 1,355 acres

APPENDIX 29
RMP ALTERNATIVE DEVELOPMENT PROCESS



APPENDIX 30
FOREST MANAGEMENT CATEGORIES

CATEGORY A
Lands available for intensive management of forest products

Areas where forest management is the primary use and where other resource uses or values occur but are not emphasized.

CATEGORY B
Lands available for restricted management of forest products

Areas where multiple use or other resource values are emphasized but timber harvest occurs.

CATEGORY C
Lands where the forest management is for the enhancement of other uses

Areas where forest management activities are specifically for the benefit of other identified resource uses or values.

CATEGORY D
Forest lands not available for management of forest products

Areas where no forest management is planned.



APPENDIX 31
WITHDRAWALS

EXISTING WITHDRAWALS/ACRES	ACRES PROPOSED FOR REVOCATION	WITHDRAWALS RETAINED
Boulder Canyon (4,709)	4,709 *	0
Federal Energy Commision R/W (149)	149	0
Grand Canyon Game Preserve (29,255)	0	29,255
Hybrid Oak (PLO 3701) (154)	154 *	0
Nixon Spring Admin. Site (1)	0	1
Public Water Reserves (1,000)	0	1,000
Tanglefoot (F.S. Admin. Site) (40)	0	40
Vermillion Cliffs Natural Area		
- Outside wilderness (28,000)	44	27,956
- Inside wilderness (42,437)	0	42,437
Virgin River Scenic Area		
- Outside wilderness (5,000)	0	5,000
- Inside wilderness (17,000)	17,000 *	0
Wilderness (265,600)	0	265,600
TOTAL (393,345) 1/	22,056	371,289 2/

* These acres were proposed for revocation in previous plans.

1/ 59,437 of these acres are double-counted because they are included in two overlapping withdrawals.

2/ 42,437 of these acres are double-counted because they are included in two overlapping withdrawals.

GLOSSARY

The following abbreviations are used in this RMP. The terms they represent are defined in the glossary.

ACEC	Area of critical environmental concern
AGFD	Arizona Game and Fish Department
APD	Application for permit to drill
AMP	Allotment management plan
ARPA	Archaeological Resources Protection Act
AUM	Animal unit month
BLM	Bureau of Land Management
C&MU	Classifications and Multiple Use Act
CEQ	Council on Environmental Quality
CRMP	Coordinated resource management plan
EA	Environmental assessment
EIS	Environmental impact statement
EPA	Environmental Protection Agency
ERMA	Extensive recreation management area
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
FWS	Fish and Wildlife Service
HAZMAT	Hazardous materials
HMP	Habitat management plan
HMAP	Herd Management Area Plan
KGS	Known geologic structure
MFP	Management framework plan
MSA	Management situation analysis
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOI	Notice of intent
NRHP	National Register of Historic Places
NHPA	National Historic Preservation Act
NWPS	National Wilderness Preservation System
OHV	Off-highway vehicle
PILT	Payment in Lieu of Taxes
R&PP	Recreation and Public Purposes Act
RCA	Resource conservation area
RMA	Recreation management area
RMP	Resource management plan
ROD	Record of decision
ROS	Recreation opportunity spectrum
R/W	Right-of-Way
SHPO	State Historic Preservation Officer
SMA	Special management area
SRMA	Special recreation management area
USDI	U.S. Department of the Interior
VRM	Visual resource management



ACRE-FOOT: The volume of material or water that will cover an area of 1 acre to a depth of 1 foot (43,560 cubic feet or 325,851 gallons).

ACTIVITY PLAN: A detailed, specific plan for management of a single resource program or plan element undertaken as necessary to implement the more general resource management plan (RMP) decisions.

ADVERSE EFFECT (Cultural Resources): Alteration of the characteristics which contribute to the use(s) determined appropriate for a cultural resource or which qualify a cultural property for the National Register to such a degree that the appropriate use(s) are diminished or precluded or the cultural property is disqualified from National Register eligibility. Criteria in the regulations of the Advisory Council (36 CFR Part 800) guide the determination of adverse effects.

AIR POLLUTION: Accumulation of aerial wastes beyond the concentrations that the atmosphere can absorb and which may, in turn, damage the environment.

AIR QUALITY CLASSES: Classes established by the EPA that define the amount of air pollution considered significant within an area:

I: Almost any change in air quality would be considered significant;

II: Deterioration normally accompanying moderate, well-controlled growth would be considered insignificant;

III: Deterioration up to the national standards would be considered insignificant.

AIRSHED: A region within which air movement tends to be confined by topographic barriers, meteorology, and local circulations.

ALKALI SOIL: Soil having so high a degree of alkalinity (pH 8.5 or higher), or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

ALLOTMENT: An area of land assigned to one or more livestock operators for grazing livestock. Allotments generally consist of BLM land but may also

include state-owned and private land. An allotment may include one or more separate pastures. Livestock numbers and seasons of use are specified for each allotment.

ALLOTMENT MANAGEMENT PLAN (AMP): A livestock grazing management plan for a specific allotment based on multiple-use resource management objectives. The AMP considers livestock grazing in relation to other uses of the range and in relation to renewable resources–watershed, vegetation and wildlife. An AMP establishes the seasons-of-use, the number of livestock to be permitted on the range and the rangeland developments needed.

ALTERNATIVES: Different ways of addressing the planning issues and management activities considered in the planning process. These serve to provide the decision maker and the public a clear basis for choices among options.

ALLUVIAL: Relating to or formed by water carrying and depositing rocks, soil, and other materials.

AMBIENT AIR QUALITY: Prevailing condition of the atmosphere at a given time; the outside air. Concentration levels in the outside air for a specified pollutant and a specified averaging time period within a given area.

ANIMAL UNIT MONTH (AUM): The amount of forage necessary to sustain one cow, two burros or five sheep for 1 month.

APPARENT TREND: Immediate or short-term tendency, used mainly to record vegetation response to management actions.

AQUATIC HABITAT: Habitat that is inundated by water with a frequency sufficient to support a prevalent form of aquatic life.

AQUIFER: An underground body of rock or similar material capable of storing water and transmitting it to wells or springs.

ARCHAEOLOGICAL DISTRICT: An area that provides a concentration of cultural properties in a discrete, definable location.

ARCHAIC: Archaeological period of about 7,000 to 300 B.C.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC): An area within the public lands where special management attention is required to protect important historic, cultural, or scenic values, fish and wildlife or natural systems or processes, or to protect life and safety from natural hazards.

ARIZONA STRIP: The northwest portion of Arizona lying north of the Colorado River.

AVERAGE LICENSED USE: The average number of AUMs authorized during the past 5 years. This figure depends on forage production and economics in any one year.

BASELINE: Conditions, including trends, existing in the human environment before a proposed action is begun; a benchmark state from which environmental consequences are forecast and changes expected to occur under existing management are projected. (For National Environmental Policy Act [NEPA] purposes, existing management is the no-action alternative.)

BLOCK (verb)/**BLOCKED-UP** (adjective): verb to consolidate like things, such as ownership of land, e.g., the BLM acquires privately owned acreage in the middle of a large area of public land.

BRECCIA PIPE: A vertical pipe-like column of broken rock. Occasionally these contain concentrations of metallic minerals deposited by mineralized fluids.

BROWSE: As a verb, to consume or feed on (a plant); as a noun, the tender shoots, twigs, and leaves of trees and shrubs often used as food by cattle, deer, elk, and other animals.

BRUSH: Vegetation consisting primarily of bushes and shrubs, usually undesirable for livestock or timber management. It may sometimes be of value for browse or for watershed protection.

BUTTE: An isolated hill with steep sides and a flat top.

CANDIDATE SPECIES:

Category I: Plant and animal species for which the FWS currently has on file substantial information to support a proposal to list as threatened or endangered.

Category II: Plant and animal species for which current information indicates that a proposal to list as threatened or endangered is possibly appropriate, but for which more information is needed to support a listing proposal.

CARRYING CAPACITY (GRAZING): The maximum stocking rate possible without inducing damage to

vegetation or related resources such as watershed. Normally expressed in terms of acres per AUMs, or sometimes referred to as the total AUMs that are available in any given area, such as a grazing allotment.

CARRYING CAPACITY (RECREATION): The maximum number of people at one time that an area or facility can accommodate without impairing the natural, cultural, or developed resource.

C&MU CLASSIFICATION: Lands classified under the Classification and Multiple Use Act.

CHAINING: A method of vegetation treatment in which large, woody species such as pinyon and juniper are removed with a heavy chain dragged between two bulldozers.

CHANGE AGENT: The apparent cause of an environmental consequence, an antecedent related empirically to an environmental consequence.

CLIMAX VEGETATION: The final vegetation community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces. This differs from the potential natural community in that it does not include naturalized non-native species.

COMMON VARIETY: Mineral deposits which do not possess a distinct special economic value over and above the normal use of the general run of such deposits.

COMMON VARIETIES: Mineral deposits which, although they may have value for use in trade, manufacture, the sciences, or in the mechanical or ornamental arts, do not possess a distinct special economic value over and above the normal uses of the general run of such deposits.

COMMUNITY: A group of plants and animals living together in a common area and having close interactions.

CONDITIONAL FIRE SUPPRESSION: Current (1988) BLM policy of planning fire suppression actions to minimize costs based on acceptable resource loss in certain areas.

CONSERVATION FOR FUTURE USE: A cultural resource will be separated and protected from other noncompatible land uses and preserved in place because (1) that particular site type is scarce or unique, (2) its information potential cannot be realized through available archaeological methods or (3) it represents an outstanding example of a particular site type.

CONTRAST (VISUAL): The effect of a striking difference in the form, line, color, or texture of an area being viewed.

CONTRAST RATING: A method of determining the extent of visual impact of an existing or proposed activity that will modify any landscape feature.

COORDINATED RESOURCE MANAGEMENT PLAN (CRMP): A plan for management of one or more allotments that involves all the affected resources, e.g., range, wildlife and watershed.

CRITICAL SOILS: Soils that (1) contain very highly saline soils and/or (2) are very highly susceptible to water erosion.

CRITICAL WATERSHED: An area of soils that (1) have a high potential for salt yield; (2) are subject to severe water and wind erosion when disturbed; (3) have high runoff potential during storm events; (4) are subject to frequent flooding; or (5) have a potential for loss of vegetation productivity under high rates of wind or water erosion.

CRITICAL WILDLIFE HABITAT: An area of land, water and airspace required for the normal needs and survival of a species.

CRUCIAL WILDLIFE HABITAT: Sensitive use areas that are necessary to the existence, perpetuation, or introduction of one or more species during critical periods of their life cycles.

CRYPTOGAMIC SOIL: A plant that reproduces by spores instead of by seeds (e.g., mosses, algae, and fungi), which occurs on the soil surface and generally produces an irregular crust.

CULTURAL CLEARANCE: A statement, based upon an inventory, that a given tract of land contains no cultural resource values or that, if cultural resources are present documents evaluation, need for consultation pursuant to NHPA and the stipulations to address potential project effect.

CULTURAL PROPERTY: Any definite location of past human activity, habitation or use identified through a field inventory (see below), historical documentation or oral evidence. This term may include (1) archaeological or historic sites, structures and places and (2) sites or places of traditional cultural or reli-

gious importance to a specific group, whether or not represented by physical remains. Cultural properties are managed by the system of inventory evaluation and protection and use.

CULTURAL RESOURCE INVENTORY: A descriptive listing and documentation of cultural resources, including photographs and maps; included are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and varying levels of intensity of on-the-ground field surveys. Three classes of cultural resource inventories are:

I (Existing data inventory): An inventory study of a defined area designed to provide (1) a narrative overview derived from existing cultural resource information, and (2) a compilation of existing cultural resource site record data on which to base the development of BLM's site record system.

II (Sampling field inventory): A sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a portion of a defined area in a manner that will allow an objective estimate of the nature and distribution of cultural resources in the entire defined area.

III (Intensive field inventory): An intensive field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a specified area.

CULTURAL RESOURCES: Those fragile and nonrenewable remains of human activities, occupations, and endeavors as reflected in sites, buildings, structures, or objects, including works of art, architecture, and engineering. Cultural resources are commonly discussed as prehistoric and historic values, but each period represents a part of the full continuum of cultural values from the earliest to the most recent.

CULTURAL SITE: A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values, meet criterion of being more than 50 years old, and meet criteria for component content.

CUSTODIAL MANAGEMENT: A limited form of resource management employed on lands with low resource production potential that are producing near potential and where opportunities for positive economic return on public investment do not exist.

DESIGNATED RIGHT-OF-WAY CORRIDOR: A parcel of land, either linear or areal, that has been identified by law, by Secretarial Order, through the land use planning process, or by other management decision, as a preferred location for existing and future right- of-way grants and suitable to accommodate more than one type of right-of-way or one or more rights-of-way which are similar, identical, or compatible.

DESIRED PLANT COMMUNITY: A plant community which produces the kind, proportion, and amount of vegetation necessary for meeting or exceeding the land use plan goals and activity plan objectives established for the site. The DPC becomes the vegetation management objective for the site and must be consistent with the site's capability to produce the desired vegetation through management, land treatment and/or a combination of the two.

DIRECTIONAL DRILLING: Slant drilling or drilling at an angle. Directional drilling is sometimes utilized when the operator is not allowed to occupy the surface of a given tract of land, but still wishes to drill a structure or target beneath that tract.

DISTANCE ZONE: The area that can be seen from a travel route as foreground-middleground (up to 3 to 5 miles), background (from foreground-middleground up to 15 miles), and areas which are seldom seen (or beyond 15 miles).

DRAINAGE BASIN: An area bounded by a water parting and drained by a particular river and its tributaries (watershed).

ECOLOGICAL STATUS: The present state of vegetation of an ecological site in relation to the natural potential plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the PNC plant community. Ecological status was formerly known as range condition.

ECOLOGICAL SITE: A distinctive segment of land that differs from other kinds of land in its ability to produce a characteristic natural plant community. An ecological site is the product of all the environ-

mental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other ecological sites in the kind or proportion of species or in total production. Ecological site is synonymous with range site.

ECONOMIC IMPACT: The change, positive or negative, in economic conditions (including distribution and stability of employment and income in affected local and regional economies) that directly or indirectly result from an activity, project, or program.

ECOSYSTEM: A complex, self-sustaining natural system which includes living and nonliving components of the environment and the circulation of matter and energy between organisms and their environment.

ENDANGERED SPECIES: An animal or plant whose prospects of survival and reproduction are in immediate jeopardy, and as further defined by the Endangered Species Act of 1973, as amended.

ENDANGERED SPECIES ACT OF 1973 (as amended): Federal law to ensure that no federal action will jeopardize federally listed or proposed threatened or endangered species of plants or animals.

ENVIRONMENTAL ASSESSMENT (EA): The procedure for analyzing the impacts of some proposed action on a given environment and the documentation of the analysis. An EA is similar to an environmental impact statement (EIS) but is generally smaller in scope. An EA may be preliminary to an EIS.

ENVIRONMENTAL CONSEQUENCE: A temporal or spatial change in the human environment caused by human acts. The change should be (1) perceptible, (2) measurable, and (3) relatable through a change agent to a proposed action or alternative. A consequence is something that follows an antecedent (as a cause or agent). Consequences are synonymous with impacts and effects. In the CEQ regulations, consequences are caused by a proposed action (40 CFR 1508.7; 1508.8; 1508.14).

ENVIRONMENTAL IMPACT STATEMENT (EIS): A written analysis of the impacts on the environment of a proposed project or RMP.

EPHEMERAL STREAM: A stream that flows only briefly after a storm or during snowmelt.

EROSION: The wearing away of the soil and surface by running water, wind, ice or other geological agents.

EVALUATION (Cultural Resources): The analysis of cultural resource inventory records, the application of professional judgment to identify characteristics that contribute to possible uses for recorded cultural resources, and the recommendation of appropriate use(s) for each resource or group of resources. National Register eligibility criteria, 36 CFR Part 60, are interpreted through or with reference to Bureau evaluation criteria.

EXCAVATION (ARCHAEOLOGICAL): The scientifically controlled recovery of subsurface materials and information from a cultural site. Recovery techniques are relevant to research problems and are designed to produce maximum knowledge about the site's use, its relation to other sites and the natural environment, and its significance in the maintenance of the cultural system.

EXISTING RIGHT-OF-WAY CORRIDOR: A parcel of land, without fixed limits or boundaries, that is being used as the location for one or more rights-of-way.

EXOTIC PLANTS: Those plant species that are not native to an area.

EXTENSIVE RECREATION MANAGEMENT AREAS (ERMAs): Areas where recreation is unstructured and dispersed and where minimal recreation-related investments are required. ERMAs, which constitute the majority of the Arizona Strip public land, provide recreation visitors the freedom of choice with minimal regulatory constraint.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA): Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy and to provide for the management, protection, development and enhancement of the public land.

FEDERAL LAND: Land owned by the United States, without reference to how the land was acquired or which federal agency administers the land, including mineral or coal estates underlying private surface.

FIRE MANAGEMENT: The integration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision making, and land management activities. Fire management is a program, not of letting fires burn, but rather of placing fire in perspective with overall land management objectives to fulfill the needs of society.

FLOOD PEAK: The highest value of the stage or discharge attained by a flood; thus, peak stage or peak discharge.

FLOODPLAIN: The nearly level alluvial plain that borders a stream or river and is subject to inundation during high water periods; the relatively flat area or lowland adjoining a body of standing or flowing water which has been or might be covered by floodwaters.

FORAGE: Vegetation of all forms available for animal consumption.

FORB: A broad-leaved herb other than grass.

FORMATIVE: Archaeological period of about 300 B.C. to 1250 A.D. Sometimes referred to as Anasazi or Pueblo period.

FREQUENCY: A quantitative expression of the presence or absence of individuals of a species in a population. It is defined as the percentage of occurrence of a species in a series of samples of uniform size.

FULL FIRE SUPPRESSION: An all-out effort to extinguish wildfires to prevent unacceptable resource damage or loss of life and property.

GOAL: The desired state or condition that a resource management policy or program is designed to achieve. A goal is usually not quantifiable and may not have a specific date by which it is to be completed. Goals are the bases from which objectives are developed.

GRAZING PREFERENCE: The total number of AUMs of livestock grazing on public lands apportioned and attached to base property owned or controlled by a permittee or lessee. Active preference and suspended preference combined make up total grazing preference.

GRAZING SYSTEM: Sequence of livestock grazing, by area, designed to accomplish management objectives.

GROUNDWATER: Water filling the unblocked pores of underlying material below the water table.

HABITAT: A specific set of physical conditions that surround the single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

HABITAT MANAGEMENT PLAN (HMP): A written and officially approved plan for a specific geographic area which identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives and outlines procedures for evaluating accomplishments.

HAZARDOUS WASTE OR MATERIAL (HAZMAT): Any substance that poses a threat to the health or safety of persons or the environment. These include any material that is toxic, ignitable, corrosive or radioactive.

HERD MANAGEMENT AREA PLAN (HMAP): A plan for the management of a geographic area used by wild horses or burros. An HMAP outlines details of a burro or horse capture plan, adoption program and long-term management of populations.

HUMAN ENVIRONMENT: The natural and physical environment and the relationship of people with that environment. (See complete definition in the CEQ regulations, 40 CFR 1508.14.)

INDICATOR: An element of the human environment affected, or potentially affected, by a change agent. An indicator can be a structural component, a functional process, or an index. A key indicator integrates several system elements in such a way as to indicate the general health of that system.

INDIRECT EFFECT: Economic impacts that result when supporting industries sell goods or services to directly affected industries or businesses.

INDIRECT OR INDUCED EMPLOYMENT: Employment in all sectors of a regional economy resulting from an increase or decrease in direct employment.

INHOLDING: A tract of land, located within a large block of public land, that is owned by a private individual or by the state.

INTEGRAL VISTA: A viewshed, or area of view, from a pristine location, such as from a Class I air quality area, that has been identified as being an important attribute to the area from which it is being viewed.

INTERDISCIPLINARY APPROACH: Cooperative, interactive consultation and analysis among individuals representing two or more disciplines. Such an approach should "ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making, which may have an impact on the human environment" [NEPA 102(2)(A)].

INTRUSION (VISUAL): A land, vegetation, or structural feature that is generally considered out of context with the characteristic landscape.

ISOLATED TRACT: A parcel of public lands surrounded by non-federal lands.

ISSUE: See planning issue.

KEY AREA: A relatively small portion of a rangeland selected because of its location, use, or grazing value as an area on which to monitor the effects of grazing use. Key areas, if properly selected, will probably the effects of current grazing management over all or part of a pasture, allotment, or other grazing unit.

KNOWN GEOLOGIC STRUCTURE (KGS): An area where an accumulation of oil or gas has been discovered by drilling and determined to be productive; the limits of the KGS include all acreage that is presumptively productive.

LAND DISPOSAL: A transaction that leads to the transfer of title of public lands from the federal government.

LAND TREATMENT: Alteration of the soil and/or vegetation of an area by mechanical, biological, or chemical means, or by burning. Land treatments are implemented to reduce erosion or improve vegetation for livestock or wildlife.

LEACH MINING: The technique of mineral extraction where a variety of chemical solutions are used to extract minerals which are soluble within those liquids. This technique may be used to extract minerals from abandoned tailings, crushed ores and in-place ores.

LEASABLE MINERALS: Minerals such as coal, oil shale, oil and gas, phosphate, potash, sodium, geothermal resources and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

LEGAL DESCRIPTION: The description of a particular parcel of land according to the official plat of its cadastral survey, including township, range and section numbers.

LIMITED SUPPRESSION: A policy of limiting fire suppression activity in areas where the expense associated with usual suppression procedures is not warranted (usually because of extreme suppression difficulty or because the values threatened are low).

LOCATABLE MINERALS: Any valuable mineral that is not salable or leasable, including gold, silver, copper, tungsten and uranium, etc. (Maley, 1983).

LODE MINING: Extraction of minerals from deposits which are still in place within the confines of the surrounding country rock.

M, I, AND C CATEGORIZATION: The grouping of grazing allotments into three different categories (M=maintain, I=improve, and C=custodial) for management purposes.

MANAGEMENT FRAMEWORK PLAN (MFP): A planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of FLPMA.

MANAGEMENT SITUATION ANALYSIS (MSA): A step in the BLM planning process that identifies existing management, physical resources and opportunities to meet the needs, concerns and issues identified through resource management planning. The MSA results in a reference document, which is kept in the resource area office. The MSA document is open for public inspection but is not distributed to the public.

MANAGEMENT USE: Study of a cultural resource to obtain specific information on (1) the kinds and rates of natural and human-caused deterioration or (2) the effectiveness of protection measures.

METALLIC MINERALS: Those minerals whose native form is metallic or whose principal products after refinement are metallic.

MINERAL ENTRY: The location of mining claims by an individual to protect his/her right to a valuable mineral.

MINERAL ESTATE: Mineral and/or subsurface ownership.

MINERAL WITHDRAWAL: Closure of land to mining laws, including sales, leasing and location, subject to valid existing rights.

MITIGATING MEASURES: Methods used (often included as stipulations or special conditions attached to a lease) to reduce the significance of or eliminate an anticipated environmental impact.

MITIGATION: The lessening of a potential adverse effect by applying appropriate protection measures, the recovery of cultural resource data or other measures.

MONITORING: The orderly collection and analysis of data to evaluate progress in meeting resource management objectives. Monitoring may also include (1) the collection of data to evaluate progress in complying with laws, regulations, policies, executive orders, and management decisions, and (2) the collection of data to assist in resource protection. Sampling of data and observation of progress toward plan objectives, the accuracy of impact analysis, and the effectiveness of mitigation measures are also of particular interest in terms of RMP monitoring activities.

MOTORIZED TRAVEL: Travel in any motorized vehicle for recreation purposes; includes driving or riding in off-highway areas (OHV travel).

MULTIPLE-USE: Management of public lands and their various resource values so that they are used in the combination best meeting the present and future needs of the American people. Relative resource values are considered, not necessarily the combination of uses that will give the greatest potential economic return or the greatest unit output.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS): National standards, established under the Clear Air Act by the Environmental Protection Agency (EPA), prescribing levels of pollution in the outdoor air which may not be exceeded. There are two levels of NAAQS: primary (set at a level to protect the public health from air pollution damage), and secondary (set at a level to protect public welfare from air pollution damage.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) OF 1969: A law enacted on January 1, 1970 that established a national policy to maintain conditions under which people and nature can exist in productive harmony and fulfill the social, economic and other requirements of present and future generations of Americans. It established the Council on Environmental Quality for coordinating environmental matters at the federal level and to serve as advisor to the President on such matters. The law made all federal actions and proposals which could have significant impact on the environment subject to review by federal, state and local environmental authorities.

NATIONAL HISTORIC PRESERVATION ACT (NHPA): The primary federal law providing for the protection and preservation of our cultural resources. Making it a national policy to preserve our cultural heritage, NHPA established the National Register of Historic Places, the Advisory Council on Historic Preservation and State Historic Preservation Officers.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP): A list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology and culture maintained by the Secretary of the Interior. Expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a)(1) (A) of the National Historic Preservation Act. Archaeological and historical sites are evaluated and managed based on eligibility for nomination.

NATIONAL WILDERNESS PRESERVATION SYSTEM: A system composed of federally owned areas designated by Congress as wilderness areas. These areas shall be administered for the use and enjoyment of the American people; management actions will preserve wilderness values for future use and enjoyment.

NATURAL AREA: Land managed for retention of (1) its typical or unusual plant or animal types, associations or other biotic phenomena or (2) its outstanding scenic, geologic, soil or aquatic features or processes.

NATURAL HAZARD: A natural characteristic of land or water resources or areas that: (1) constitutes conditions significantly dangerous, or potentially significantly dangerous, to human life, or property, or that (2) would be significantly dangerous to life or the safety of property if development or other activity were permitted. Such a hazard may be either existing or considered likely to occur in the future.

NEPA DOCUMENTATION: A document prepared to assess environmental impacts of a proposed action, as required by NEPA and the CEQ regulations at 40 CFR 1500. Four types of documents could be prepared, depending on the scope of the proposal: an environmental impact statement, for major actions; and environmental assessment, for actions with no significant impacts; a categorical exclusion, for certain actions predetermined to have no significant impacts; or a preemptory rejection, for projects that are not feasible from a legal or technical standpoint.

NONPOINT POLLUTION: That from scattered sources, as opposed to pollution from one location, e.g., manufacturing plant.

NONUSE: Current authorized grazing use (in AUMs) that is not used during a given time period. Nonuse is applied for and authorized on an annual basis.

NOTICE OF INTENT (NOI): A notice submitted to BLM by a geophysical exploration company outlining a proposed oil and gas exploration program.

OFF-HIGHWAY VEHICLE (OHV): Any motorized vehicle designed for cross-country travel over any type of natural terrain. Exclusions (from Executive Order 11644, as amended by Executive Order 11989) are any military, fire, emergency or law enforcement vehicles while being used for emergency purposes, any vehicle whose use is expressly authorized or otherwise officially approved, vehicles in official use and any combat support vehicle in times of national defense emergencies.

OFF-HIGHWAY VEHICLE DESIGNATIONS:

Open: Designated areas and trails where OHVs may be operated (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

Limited: Designated areas and trails where the use of OHVs is subject to restrictions, such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions); limiting use to existing roads and trails or limiting use to designated roads and trails. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

Closed: Designated areas, roads and trails where the use of OHVs is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

OLD GROWTH: Yellow pine is the local name given to old growth ponderosa pine, generally older than 150 years, having reddish-brown to yellow bark with wide, smooth plates. It is distinctly different in appearance from the relatively young "blackjack pine" which has dark bark with narrow, rough ridges.

PALATABILITY: The relish with which a particular species or plant part is consumed by an animal.

PALEOINDIAN: Archaeological period of about 10,000 to 7,000 B.C.

PALEONTOLOGY: The study of fossils.

PARTICULATE MATTER: Any material, except water, in a chemically uncombined form that is or has been airborne and exists as a liquid or solid at standard temperature and pressure. Minute particles of coal dust, fly ash, and oxides temporarily suspended in the atmosphere.

PASTURE: As used in this document, a subdivision of a grazing allotment.

PATENT: A government deed that conveys legal title for land to an individual or another government entity.

PAYMENT IN LIEU OF TAXES (PILT): Payments to local or state governments based on ownership of federal land and not directly dependent on production of outputs or receipt sharing.

PERMEABILITY (SOIL): The ease with which gases or liquids penetrate or pass through soil.

PETROGLYPH: Prehistoric rock art, pecked, scratched or abraded into a stone surface.

PHENOLOGY: The science concerned with periodic biological events in their relation to seasonal climatic changes. Plant phenology refers to dates of sprouting, flowering, seed production, and regrowth, as well as other observable occurrences in plant development.

PICTOGRAPH: Prehistoric rock art, either drawn or painted onto a stone surface.

PLACER MINING: That form of mining in which the surficial detritus (surface soil) is washed for gold or other valuable minerals (Dictionary of Geologic Terms, Anchor Press, 1979).

PLANNING CRITERIA: The standards or rules and other factors developed by the manager and interdisciplinary team for their use in forming judgments about decision making, analysis, and data collection during planning.

PLAN OF OPERATIONS: As used in this document, a plan submitted by an operator (lessee or mining claimant) which outlines in detail proposed exploration and mining activities that would disturb more than 5 acres.

PLANT VIGOR: The relative well-being and health of a plant as reflected by its ability to manufacture sufficient food for growth and maintenance.

POTENTIAL NATURAL COMMUNITY VEGETATION: The final vegetation community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces.

POT HUNTING: Illegal collection of artifacts, either from the land surface or by digging into an archaeological site.

PREFERRED: That plan alternative, in the draft environmental analysis or impact statement, which management has initially selected as offering the most acceptable resolution of the planning issues and management concerns.

PRESCRIBED FIRE: The skillful application of fire to natural fuels under conditions of weather, fuel moisture, soil moisture, etc., that will allow confinement of the fire to a predetermined area and at the same time produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives of wildlife management, grazing, hazard reduction, etc. Its objective is to employ fire scientifically to realize maximum benefits at minimum damage and acceptable cost.

PRIMITIVE RECREATION: Non-motorized and undeveloped types of outdoor recreation activities.

PROPER USE: (1) A degree of utilization of current year's growth which, if continued, would achieve the management objectives and maintain or improve the long-term productivity of the site; or (2) the percentage a plant is utilized when the rangeland as a whole is properly utilized. Proper use varies with time and systems of grazing. Proper use is synonymous with proper utilization.

PUBLIC LAND: Vacant, unappropriated and unreserved land that remains in federal stewardship; also, land in federal stewardship obtained in exchange for private land or for timber on public land; land administered by the BLM for the benefit of the public.

PUBLIC PARTICIPATION: Part of the BLM's planning system that provides the opportunity for citizens as individuals or groups to express local, regional and national perspectives and concerns in the rulemaking, decision making, inventory and planning processes for public land. This includes public meetings, hearings or advisory boards or panels that may review resource management proposals and offer suggestions or criticisms for the various alternatives considered.

PUBLIC VALUES: A cultural property is eligible for consideration as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study or related educational and recreational uses by members of the general public.

RANGE IMPROVEMENT: An authorized activity or program on or relating to rangelands which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; and provide habitat for livestock, wild horses and burros, and wildlife. The term includes structures, treatment projects, and mechanical means to accomplish the desired results.

RANGELAND: A kind of land that supports vegetation useful for grazing or browsing, on which routine management of that vegetation is through manipulation of grazing rather than cultural practices. (Rangelands include natural grasslands, marshes, riparian zones, and wet meadows. Rangeland includes lands revegetated naturally or artificially to provide a plant cover which is managed like native vegetation.)

RANGE SITE: See ecological site.

RECREATION AND PUBLIC PURPOSES ACT (R&PP): An act that authorizes the Secretary of the Interior to lease or convey public land for recreational and public purposes under specified conditions to states or their political subdivisions and to nonprofit corporations and associations.

RECREATION MANAGEMENT AREA (RMA): An area requiring explicit recreation management to achieve the Bureau's recreation objectives and to provide specific recreation opportunities. Special management areas are identified in the RMP, which also defines the management objectives for the area. The BLM's recreation investments are concentrated in these areas.

RECREATION OPPORTUNITY SPECTRUM (ROS): A conceptual framework for inventory, planning, and management of recreation resources.

RECREATIONAL OPPORTUNITY: Those outdoor recreational activities which offer satisfaction in a

particular physical, social and management setting in the EIS area. These activities are primarily hunting, fishing, wildlife viewing, photography, boating and camping.

REHABILITATION: Restoration of damaged or lost environment as nearly as possible to its original state.

REMOTENESS: Recreation experience opportunities in backcountry, natural-appearing settings.

RESEARCH NATURAL AREA (RNA): A natural area established and maintained for research and education, which may include (1) typical or unusual plant or animal types, associations or other biotic phenomena or (2) characteristic or outstanding geologic, soil or aquatic features or processes. The public may be excluded or restricted from such areas to protect studies.

RESOURCE AREA: The smallest administrative subdivision of a BLM district.

RESOURCE CONSERVATION AREA (RCA): An area where several important resource values and uses such as wildlife, woodlands, recreation, cultural, grazing, watershed overlap requiring detailed coordinated resource management planning to reduce conflicts, improve resource conditions, protect significant resources and to design management systems and monitoring.

RESOURCE MANAGEMENT PLAN (RMP): A written land use plan that outlines BLM's decisions and strategies for managing resources in a particular area. The RMP replaced the MFP in BLM's planning system.

REST-ROTATION GRAZING SYSTEM: A grazing plan providing for systematic and sequential grazing by livestock and resting from livestock use on a range area to provide for production of livestock while maintaining or improving the vegetation and soil fertility.

RIGHT-OF-WAY: The legal right for use, occupancy, or access across land or water areas for a specified purpose or purposes. Also, the lands covered by such a right.

RIGHT-OF-WAY CORRIDOR: The designation of an existing group of rights-of-way capable of accommodating one or more compatible rights-of-way of like kind. Such a corridor contains only public land.

RIPARIAN HABITAT (AREAS): Areas of land directly influenced by permanent water and having visible characteristics, e.g., vegetation, reflective of the presence of permanent water, i.e., surface and/or subsurface.

SALABLE MINERALS: Minerals such as common varieties of sand, stone, gravel, pumicite and clay that may be acquired under the Materials Act of 1947, as amended.

SALINE SOIL: Soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

SALINITY: A measure of total dissolved solids (TDS) including all inorganic material in solution, whether ionized or not.

SCENIC CORRIDOR: The area encompassing the foreground-middleground zone along roadways.

SCENIC QUALITY: The visual aesthetics of an area, based on the key factors: landforms, vegetation, color, water, influence of adjacent scenery, scarcity, and amount of cultural modification. It indicates the visual quality of an area relative to other scenery in the region. BLM ratings are A = exceptional/extraordinary; B = moderate; and C = low/common.

SCOPING PROCESS: An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. Scoping may involve public meetings, field interviews with representatives of agencies and interest groups, discussions with resource specialists and managers, written comments in response to news releases, direct mailings and articles about the proposed action and scoping meetings.

SEASON OF USE: The time of livestock grazing on a range area.

SEDIMENT: Soil or mineral material transported by water and deposited in streams or other bodies of water.

SEDIMENT YIELD: The total amount of eroded material that completes the journey from its source to a downstream control point, such as a reservoir.

SENSITIVE SOILS: Soils that are erodible, have a relatively high content of clay and silt, and are slightly to moderately saline.

SENSITIVE SPECIES (PLANTS AND ANIMALS): Species occurring on public lands and requiring special management attention to protect it and to prevent irreparable damage to the important resources or other natural systems or processes on which it depends. The sensitive list is made up of species listed in category 3C in the Federal Register, Vol. 50 No. 188, September 27, 1985, page 39526.

SENSITIVITY LEVEL (VISUAL): An index of the response to visual change in an area based on such weighted criteria as social attitudes, amount of use, types of resource uses, management attitudes, etc. Levels are classified as high, medium, or low.

SERAL COMMUNITY: One of a series of biotic communities that follow one another in time on any given area. Seral community is synonymous with successional community and may be synonymous with seral stage and successional stage.

SERAL STAGE: See seral community.

SHRUB: A plant that has a persistent woody stem, a relatively low growth habitat, and generally produces several basal shoots instead of a single trunk.

SOCIOCULTURAL USE: A social and/or cultural group perceives that a cultural resources, place, structure or geographic location has characteristics which help maintain the group's heritage or identity.

SPECIAL MANAGEMENT AREA (SMA): An area receiving more intensive management for one or more resources, such as riparian, cultural or wildlife.

SPECIAL RECREATION MANAGEMENT AREA (SRMA): An area where special or more intensive types of recreation management are needed. Recreation activity plans are required and greater managerial investments (e.g. facilities, supervision, interpretation, etc.) can be anticipated. Includes areas which are: (1) congressionally recognized--such as wild and scenic rivers, national trail system, national recreation areas, wilderness areas, and portions of national conservation areas; (2) administratively recognized--where significant recreation issues and management concerns (such as user conflicts, visitor safety, or resource damage) exist for which special or more intensive management may be required.

SPECIAL STATUS SPECIES: Wildlife and plant species either federally listed or proposed for listing as endangered or threatened, state-listed or BLM-determined priority species.

SPLIT ESTATE: The surface estate and the mineral estate of a parcel of land belong to different owners.

STABILIZATION (CULTURAL): Protective techniques usually applied to structures and ruins to keep them in their existing condition, prevent further deterioration, and provide structural safety without significant rebuilding.

STAGNANT PLANT COMMUNITY: An undynamic plant community which is dominated by one or two plant species so thoroughly that change in plant species over time is undetectable over long time periods. Examples are monocultures of sagebrush, pinyon-juniper, etc.

STATE HISTORIC PRESERVATION OFFICER: The official who is appointed by the Governor to be responsible for administering the State Historic Preservation Program pursuant to Section 101(b)(1) of the National Historic Preservation Act.

STATE INDEMNITY SELECTION: Land owed to the state to replace land that the state would have received as a term of statehood but did not because the land was already appropriated under the public land laws or was within adjacent states.

STIPULATION: A requirement, usually dealing with protection of the environment, that is made a part of a lease, grant, or other authorizing document.

SUBSURFACE MINERALS: Minerals found below the earth's surface, including oil and gas.

THREATENED SPECIES: Any plant or animal species that is likely to become an endangered species throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species Act of 1973.

TOPOGRAPHY: The relief and contour of the land, especially when taken collectively, as over a region or large area.

TOTAL DISSOLVED SOLIDS (TDS): All inorganic material in solution, whether ionized or not.

TOTAL SUSPENDED PARTICULATES (TSP): All solid or semisolid material found in the atmosphere.

TREND: The direction of change in range condition (ecological status or resource value ratings) observed over time.

TRESPASS: The use of public land without proper authority, resulting either from a willful or negligent act.

UNDESIRABLE PLANT COMMUNITY: A plant community which produces the kind, proportion, and amount of vegetation that fail to meet land use plan and activity plan goals and objectives established for the site. The UPC is the inconsistent to the desirable plant community and with the site's capability.

UTILIZATION: The proportion or degree of current year's forage production that is consumed or destroyed by animals (including insects). May refer to either a single plant species, a group of species, or the vegetation as a whole. Utilization is synonymous with use.

VEGETATION TYPE: A kind of existing plant community with distinguishable characteristics described in terms of the present vegetation that dominates the aspect by physiognomy of the area.

VISITOR DAY: Twelve visitor hours which may be aggregated continuously, intermittently, or simultaneously by one or more persons.

VISUAL DISTANCE ZONE: The normal distance of viewers from an area being viewed: foreground/middleground (up to 5 miles); background (up to 15 miles); and seldom seen (more than 15 miles or areas screened from normal viewpoints).

VISUAL ELEMENTS: The elements that determine how the character of a landscape is perceived. Form: the shapes of objects such as landforms or patterns in the landscape. Line: perceivable linear changes in contrast resulting from abrupt differences in form, color, and texture. Color: the reflected light of different wave lengths that enables the eye to differentiate otherwise identical objects. Texture: the visual result of variation in the surface of an object.

VISUAL RESOURCE MANAGEMENT (VRM) CLASSES: Classification containing specific objectives for maintaining or enhancing visual resources, including the amount of acceptable change to the existing landscape to meet established visual goals.

WATER QUALITY: The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

WATER TABLE: The upper level of an unconfined underground water body.

WATERSHED: A total area of land above a given point on a waterway that contributes runoff water to the flow at that point.

WATERSHED CONDITION: An assessment, or categorization, of an allotment in terms of current erosion conditions, erosion hazards and the soil moisture/temperature regime.

WETLANDS: Lands including swamps, marshes, bogs, and similar areas such as wet meadows, river overflows, mud flats, and natural ponds.

WILDERNESS AREA: An area officially designated as wilderness by Congress. Wilderness areas will be managed to preserve wilderness characteristics and shall be devoted to the public purposes of conservation and recreational, scenic, scientific, educational, and historical uses.

WILDERNESS MANAGEMENT POLICY: The BLM policy that governs administration of public lands designated as wilderness areas by Congress. It is based on the Wilderness Act of 1964 and FLPMA of 1976. FLPMA requires a wilderness area to be a roadless area or island that has been inventoried and found to have wilderness characteristics as described in Section 603 of FLPMA and in Section 1(c) of the Wilderness Act.

WILDLIFE: All species of mammals, birds, fish, amphibians, and reptiles found in a wild state.

WILDLIFE HABITAT: All elements of a wild animal's environment necessary for completion of its life cycle, including food, cover, water, and living space.

WITHDRAWAL: An action that restricts the disposal of public land and holds it for specific public purposes; also, public land that has been dedicated to public purposes.

REFERENCES

ALTSCHUL, J. A. and H. C. Fairley. 1989. Man, Models & Management, An Overview of the Archaeology of the Arizona Strip and the Management of its Cultural Resources. USDA Forest Service, USDI BLM.

BAILLIEUL, T. A. and R. C. Zollinger. 1980. National uranium resource evaluation, Grand Canyon quadrangle, Ariz. U. S. Dept. of Energy Open File Report PGI-20, 43 p.

BERGER, B. 1986. Descriptive model of carbonate hosted Au-Ag *in* Cox, D. P. and D. A. Singer (eds.), Mineral Deposit Models: U. S. Geological Survey Bulletin 1693, 175 p.

BERNSTEIN, L.R. 1986. Geology and minerology of the Apex Germanium - Gallium mine, Washington Co., Utah *in* Griffen, D.T. and R.W. Phillips eds., Thrusting and Extensional Structures and Mineralization in the Beaver Dam Mountains, Southwestern Utah: Utah Geological Association Publication 15, pp. 149-158.

BERRY, K. H. (ed). 1984c. Status of the desert tortoise in the United States. Report from Desert Tortoise Council to U. S. Fish and Wildlife Service, Sacramento, Calif. Order No. 11310-0083-81.

BUREAU OF LAND MANAGEMENT. 1979. Vermillion proposed grazing management final environmental impact statement, Dept. of Interior. St. George, Utah.

BUREAU OF LAND MANAGEMENT. 1980. Shivwits proposed grazing management final environmental impact statement, Dept. of Interior. St. George, Utah.

BUREAU OF LAND MANAGEMENT, Arizona State Office. 1988. DRAFT Arizona implementation strategy for management of desert tortoise. U. S. Dept. of Interior, Bureau of Land Management, Phoenix, Ariz.

BURGE, B. L. 1979. A survey of the present distribution of the desert tortoise (*Gopherus agassizi*) in Arizona. U. S. Dept. of Interior, Bureau of Land Management, Report on Contract No. YA-512- CT8-108.

BUTH, D. 1986. Genetic differentiation between populations of desert tortoises. Paper presented at the 1986 Desert Tortoise Council Symposium, March/April, 1986, Palmdale, Calif.

CHEEVERS, C. W. and R. R. Rawson. 1979. Facies analysis of the Kabiab formation in northern Arizona, southern Utah and southern Nevada *in* Baars, D. L. (ed.), Permianland: Four Corners Geological Society Field Symposium Guidebook, 105-114.

COFFEEN, M. 1985. State report, Utah Department of Wildlife Resources. Paper presented at the 1985 Desert Tortoise Council Symposium, Laughlin, Nev. March, 1985.

COFFEEN, M. 1986a. A 1985 population study plot of the threatened desert tortoise, *Gopherus agassizii*, on the Beaver Dam Slope, Utah. Paper presented at the 1986 Desert Tortoise Council Symposium, Palmdale, Calif. March, 1986.

COFFEEN, M. 1986b. State report--Utah--1985. Paper presented at the 1986 Desert Tortoise Council Symposium, Palmdale, Calif. March, 1986.

COFFEEN, M. 1987. Population changes on the Woodbury-Hardy study area between 1981 and 1986. Paper presented at the 1987 Desert Tortoise Council Symposium, Las Vegas, Nev. March, 1987.

COFFEEN, M. 1988. 1987 desert tortoise reproductive studies-- Beaver Dam Slope, Utah. Paper presented at the 1988 Desert Tortoise Council Symposium, Laughlin, Nev. March, 1988.

COOMBS, E. M. 1977b. Status of the desert tortoise (*Gopherus agassizi*), in the State of Utah. 95-101 in M. Trotter and C. G. Jackson, Jr. (eds.), Proc. of the Desert Tortoise Council Symposium, San Diego, Calif.

COOPER, J. G. 1963. Description of *Xerobates agassizii*. 120 p. *in* Cooper, J. G., New California Animals. Proceeds California Academy Science. 2:118-123.

DODD, C. K. 1980. Endangered and threatened wildlife and plants: listing as threatened with critical habitat for the Beaver Dam Slope's population of the desert tortoise in Utah. Federal Register 45(163):55654-55666.

DUNCAN, R. 1987. A population of the desert tortoise in the Gold Butte study plot, southern Nevada, in 1986. Paper presented at the 1987 Desert Tortoise Council Symposium, Las Vegas, Nev. March, 1987.

DUNCAN, R. and T. Esque. 1986b. Relative abundance patterns and distribution of the desert tortoise in association with the designated crucial areas of southern Nevada. Paper presented at the 1986 Desert Tortoise Council Symposium, Palmdale, Calif. March, 1986.

DUCK, T. A. and J. Snider. 1987. Analysis of a desert tortoise population and habitat on the Beaver Dam Slopes, Arizona. U. S. Dept. of Interior, Bureau of Land Management, Arizona Strip Dist., 225 N. Bluff St., St. George, Utah 84770.

ELLIS, J. 1979. Habitat evaluation distribution of peregrine falcon in Arizona. Arizona Game and Fish Department, Phoenix, Ariz.

FISHER, D. G. and J. D. Julliand. 1986. Mineral deposit types and their characteristics: U. S. Bureau of Land Management Technical Reference 3031-1, 153 p.

HEYLMUN, E. B. 1987. Shallow oil potential seen in NW Arizona. Oil and Gas Journal, Sept. 14, 1987, 77-80.

HINTZE, L. F. 1973. Geologic History of Utah: Brigham Young University Geology Studies, v. 20, pt. 3, 131 p.

HOHMAN, J. and R. Ohmart. 1986. Stratiigraphy and structure of the Beaver Dam Mountains Utah *in* Griffen, D.T. and R.W. Phillips eds., Thrusting and Extensional Structures and Mineralization in the Beaver Dam Mountains, Southwestern Utah: Utah Geological Association Publication 15.

KEITH, S. B., D. E. Gest, E. DeWitt, N. W. Toll, and B. A. Everson. 1983. Metallic mineral districts and production in Arizona: Ariz. Bureau of Geology and Mineral Technology Bulletin 194, 58 p.

KENNEDY, W. A., et al. 1987. Management of desert tortoise habitat, report to the Chief, U. S. Dept. of Interior, Bureau of Land Management, Washington, D. C.

KREWEDL, D. A. and J. C. Carisey. 1986. Contributions to the geology of uranium mineralized breccia pipes in northern Arizona: Ariz. Geological Society Digest Volume XVI, 179-186.

MINDEN, R. L. 1980. Investigations of the desert tortoise (*Gopherus agassizi*) on the Beaver Dam Slopes, Washington County, Utah. Utah Div. of Wildlife Resources, Salt Lake City, Utah. Publ. No. 80-21.

MINDEN, R. L. and S. M. Keller. 1981. Population analysis of the desert tortoise (*Gopherus agassizi*) on the Beaver Dam Slopes, Washington County, Utah. Utah Dept. of Natural Resources, Div. of Wildlife Resources, Publ. No. 81-14.

MOLLOHAN, Cheryl. 1989. Wild Turkey Habitat Requirements. Arizona Game and Fish Department Draft Guidelines, Habitat Section, 6 pp.

MOORE, R. T. 1972. Geology of the Virgin and Beaver Dam Mountains, Arizona: Ariz. Bureau of Mines Bulletin 186, 65 p.

NIELSON, R. L. 1986. The Toroweap and Kaibab formations, southwestern Utah *in* Griffin, D. T. and R. W. Phillips (eds.), Thrusting and Extentional Structures and Mineralization in the Beaver Dam Mountains, Southwestern Utah: Utah Geological Association Publication 15, 37-53.

PATTERSON, R. 1982. The distribution of the desert tortoise (*Gopherus agassizi*). 51-53 in Bury, R. B. (ed). 1982. North American Tortoise Conservation and Ecology. U. S. Dept. of Interior, U. S. Fish & Wildlife Service, Wildlife Research Report 12. Also 14-21 *in* N. Enberg, S. Allan, and R. Young (eds.), Proc. 1976 Symposium of the Desert Tortoise Council, Long Beach, Calif.

REYNOLDS, M. W., J. G. Palacos, and D. P. Elston. 1988. Potential petroleum source rocks in the late proteroeoic chuar group, Grand Canyon, Arizona: U. S. Geological Survey Circular 1025, 49-50.

RYDER, R. T. 1983. Petroleum potential of wilderness lands in Arizona *in* Miller, B. M. (ed.), Petroleum Potential of Wilderness Lands in the Western United States: U. S. Geological Survey Circular 902 A-P, C1-C22.

SCARBOROUGH, R. B. 1981. Radioactive occurrences and uranium production in Arizona: Ariz. Bureau of Geology and Mineral Technology Open File Report 81-1, 297 p.

SHEPPARD, G. P. 1980a. Desert tortoise study: Beaver Dam Slope's population, Arizona. U. S. Dept. of Interior, Bureau of Land Management, Arizona Strip District, St. George, Utah, 13 p.

SHEPPARD, G. P. 1980b. Status of the Arizona Beaver Dam Slope population of desert tortoises. 23-32 *in* K. A. Hashagen (ed). Proc. 1980 Symposium of the Desert Tortoise Council, Long Beach, Calif.

SHEPPARD, G. P. 1981. Desert tortoise population of the Beaver Dam Slope in northwestern Arizona. 24-47 in K. A. Hashagen (ed.), Proc. 1981 Symposium of the Desert Tortoise Council, Long Beach, Calif.

SHEPPARD, G. P. 1982. Status report of the Beaver Dam Slope's desert tortoise population. U. S. Dept. of Interior, Bureau of Land Management, Arizona Strip Dist., St. George, Utah, 18 p.

SHEPPARD, G. P., T. Cordery, and J. Castellano. 1983. Desert tortoise 1983 status report for the Arizona Strip and Phoenix Districts, Bureau of Land Management. 12-13 in K. A. Hashagen and M. W. Trotter (eds.), Proc. 1983 Symp. of the Desert Tort. Council, Long Beach, Calif.

SPANG, E. F., et al. 1988. Desert tortoise habitat management on the public lands. U. S. Dept. of Interior, Bureau of Land Management, Div. of Wildlife and Fisheries, 903 Premier Bldg., Washington, D. C., 20240.

SPOONER, S. D. 1988. Bureau of Land Management, Dixie Resource Area: Personal communication, Apr. 14, 1988.

STEWART, J. H., F. G. Poole, and R. F. Wilson. 1972. Stratigraphy and origin of the triassic Moenkopi formation and related strata in the Colorado Plateau region: U. S. Geological Survey Professional Paper 691, 195 p.

TAUBERT, B. D., and T. B. Johnson. 1984. Update of desert tortoise (*Gopherus agassizi*) distribution in Arizona. 55-57 in M. W. Trotter (ed.), Proc. 1984 Symposium of the Desert Tortoise Council, Long Beach, Calif.

TAUBERT, B. D., and T. B. Johnson. 1985. Update of desert tortoise (*Gopherus agassizi*) distribution in Arizona. Arizona Game and Fish Department, Phoenix, Ariz.

THOMPSON, R. A. et al. 1983. Class I Cultural Resource Overview for Cedar City District of the BLM, Utah. (1983:131)

U. S. DEPT. OF INTERIOR, Bureau of Land Management, Arizona Strip District. 1983. Virgin River-Pakoon Basin Habitat Analysis. U. S. Dept. of Interior, Bureau of Land Management, St. George, Utah.

U. S. DEPT. OF INTERIOR, Bureau of Land Management, Arizona Strip District, and Arizona Department of Game & Fish. 1983. Virgin River-Pakoon Basin Habitat Management Plan. U. S. Dept. of Interior, Bureau of Land Management, St. George, Utah.

VILLALOBOS, H. A. and L. W. Hamm. 1981. Map showing mineral resource potential of the Paiute instant (Primitive) study area, Mohave Co., Arizona: U. S. Geological Survey Miscellaneous Field Studies Map MF-1160-D, scale 1:24,000.

WALLING, B.A., et al. 1986. Excavations at Quail Creek. BLM, Utah, Cultural Resources Series No. 20, SaltLake City (1986).

WILHELM, M., and R. Holt. 1975. Arizona Strip desert tortoise study. U. S. Dept. of Interior, Bureau of Land Management, Arizona Strip District, St. George, Utah.

WILSON, E. D. 1962. A resume of the geology of Arizona: Ariz. Bureau of Mines Bulletin 171, 140 p.

WOODBURY, A. M. and R. Hardy. 1940. The dens and behavior of the desert tortoise. Science, 92:529.

WOODBURY, A. M. and R. Hardy. 1948a. Studies of the desert tortoise, *Gopherus agassizii*. Ecol. Monogr., 18:145-200.

INDEX TO COMMENTS

GOVERNMENT AGENCIES

Arizona Commission of Agriculture and Horticulture	01-04,01-07	V-13,19
Arizona Department of Commerce, State Clearinghouse	01-07	V-17
Arizona Department of Environmental Quality	04-01	V-55
Arizona Game & Fish Department	05-260	V-343
Arizona Geological Survey	01-03	V-12
Arizona State Department of Health Services	01-07	V-17
Arizona State Department of Transportation	01-07	V-19
Arizona State Division of Natural Resources	01-07	V-18
Arizona State Parks	01-02	V-11
City of Page	05-148	V-220
Fire County Assoc. of Governments	05-34	V-149
Kanab City	04-25	V-116
Northern Arizona Council of Governments	03-01	V-36
Orderville City	05-45	V-157
USDA Soil Conservation Service	01-09	V-21
USDI Bureau of Mines	01-06	V-16
USDI Geological Survey	02-01	V-22
USDI National Park Service, Lake Mead NRA	03-04	V-39
USDI National Park Service, Western Region	02-06	V-29
USDI Fish and Wildlife Service	04-20;05-334	V-108;V-393
U.S. Environmental Protection Agency, S. F., CA	04-13	V-94

INTEREST GROUPS

American Rivers	05-186	V-255
Arizona Desert Bighorn Sheep Society, Inc.	05-332	V-390
Audubon Society, Prescott, Arizona	04-12	V-88
Audubon Society, Sedona, Arizona	05-185	V-251
Dixie Wildlife Federation	04-10	V-78
Energy Fuels Nuclear	05-256	V-299
Fredonia Natural Resource Conservation District	04-28	V-120
Grand Canyon Trust	05-259	V-327
Kaibab Forest Products Company	05-149	V-225
Lake Powell Chronicle	05-11	V-137
Memorial Junior High Conservation Club; Jimmy Jacobs	03-09	V-45
Memorial Junior High Conservation Club; Eric Fabiano	03-08	V-44
Memorial Junior High Conservation Club; Jeremy Schunacha	03-07	V-44
National Audubon Society	04-07	V-69
National Parks and Conservation Association	04-08	V-71
Northern Arizona Forest Laboratory	05-03	V-133
Outdoor Recreation Coalition of America (ORCA)	05-44	V-155
Page-Lake Powell Hot Air Balloon Regatta Committee	05-62	V-170
Page-Lake Powell Chamber of Commerce	04-29	V-121
Sierra Club, Plateau Group	04-30	V-123
Southern California Edison Company	03-10	V-45
Southwest Resource Council	04-03	V-59
The Desert Tortoise Council	04-32	V-128
The Arizona Nature Conservancy	05-258	V-323
The Wildlife Society, Arizona Chapter	04-24;05-257	V-114;V-314
Union Pacific Resources-Minerals	05-275	V-356
Wizards Motorcycle Club	04-33	V-131

INDEX TO COMMENTS (continued)

INDIVIDUALS

_____	05-170	V-242
_____	05-280	V-364
_____	05-168	V-241
_____	05-189	V-265
_____	05-126	V-208
_____, Ben R.	05-183	V-248
_____, Callie J.	05-179	V-246
_____, Craig	05-180	V-247
_____, Jacob	05-216	V-279
_____, Jerry	05-262	V-349
_____, Lyle	05-08	V-136
_____, M. N.	05-173	V-243
_____, Paul	05-78	V-179
_____, Rebecca	05-307	V-377
_____, Tamela	05-1-5	V-198
Ackerman, Bruce	05-120	V-196
Ahterly, Ted	05-60	V-168
Alvey, Brent	05-28	V-146
Alvey, Karen	05-37	V-151
Alvey, LaDell	05-36	V-150
Anderson, J. Dallas	05-77	V-178
Anderson, Robert	05-282	V-365
Andrus, James R.	05-48	V-161
Artemesia, E.A.	03-06	V-42
Atkins, Clayton	03-03	V-38
Baca, Georgia	05-110	V-200
Barlow, Elaine S.	05-240	V-291
Barlow, Maureen	05-145	V-218
Barlow, Valiant Y.	05-241	V-291
Barnhurst, Dallas	05-284	V-366
Barnhurst, Diane	05-285	V-366
Barnson, Charlotte	05-278	V-363
Barnson, Duane	05-276	V-362
Bartlett, Daniel A.	05-27	V-146
Black, Alan	05-178	V-246
Black, Launna L.	05-154	V-234
Blake, Arla	05-268	V-352
Blake, Duane	05-82	V-182
Blake, J. L.	05-269	V-353
Blasdell, William H.	05-23	V-144
Boardman, Alan	05-109	V-200
Bonham, Jim	05-88	V-189
Boswell, Valerie	05-264	V-350
Boyd, Glover	05-106	V-198
Bradford, Vic	05-277	V-362
Brinkerhoff, Kurt	05-61	V-169
Brown, Carl	05-107	V-199
Brown, Richard F.	05-329	V-388
Brunting, Kevin	05-101	V-196
Bundy, Ed	05-01	V-132
Bunting, Brett	05-137	V-214
Bunting, George	05-321	V-384
Bunting, James	05-322	V-385
Button, Chris	05-04	V-134
Campbell, Arden	05-164	V-239
Campbell, Darlene S.	05-165	V-239
Canley, Jessikah T.	05-234	V-288
Cannell, Douglas	05-296	V-372
Carr, Stephen B.	03-13	V-50
Caroll, _____	05-236	V-289
Caruso, Joseph	05-55	V-166
Caruso, Robert	05-40	V-152
Caruso, VerJean	05-17	V-141
Casadevall, Bill	05-53	V-165
Cawley, Artemisia	05-238	V-290
Ceal, Rebecca	05-06	V-135
Chamberlain, Kathy	05-93	V-192
Chenard, Lucille M.	05-281	V-364
Chesler, Bruce	03-12	V-49
Clark, Gibert	05-266	V-351
Clark, Stan	05-161	V-237
Clark, Travis	05-152	V-233
Cook, Jeffrey	05-125	V-208
Corn, Carlae	05-13	V-138
Cosby, Dennis	05-132	V-211
Cosby, Jr., H. F.	05-131	V-211
Cosby, Tommy	05-130	V-210
Cothern, Richard	05-270	V-353
Cothern, W. L.	05-267	V-352
Cox, Christine	05-59	V-168
Cox, Douglas	05-146	V-218
Crofts, Kathrine	05-09	V-136
Crosby, Mary	05-324	V-386
Dalton, Eric H.	05-303	V-375
Dalton, Hope	05-160	V-237
Darger, Karen	05-231	V-286
Davenport, Marietta A.	02-02	V-23
Dearden, Michael	05-15	V-139
DeMille, Sandee	05-26	V-145
Dutson, Gwinevere	05-246	V-294
Early, Carolyn	05-176	V-245
Evans, Chic	05-95	V-193
Esplin, Darlo L.	05-21	V-143
Esplin, Don	05-31	V-148
Esplin, John	05-136	V-213
Esplin, Merlin & Christine	05-83	V-183
Esplin, Stan	05-22	V-143
Evans, Vera	05-117	V-204
Finucane, Stephen J.	02-04	V-26
Fordyce, Dave	05-292	V-370
Foremaster, LaVar	05-298	V-373
Frost, Ina Fae	05-169	V-241
Gardner, Dean	05-16	V-140

INDEX TO COMMENTS (continued)

INDIVIDUALS

Geisinger, Harry	05-293	V-370
Gilbert, Barbara	05-68	V-173
Glazier, Mel	05-294	V-371
Glover, Belinda	05-63	V-171
Glover, Deanna J.	05-87	V-189
Glover, Don	05-155	V-234
Glover, Don	05-103	V-197
Glover, Jerry	05-100	V-195
Glover, Jerry A.	05-328	V-388
Glover, Kenley	05-99	V-195
Glover, Sherre	05-175	V-244
Glover, Weldon	05-96	V-193
Goulding, Scot	05-50	V-163
Guymon, Kenneth D.	05-75	V-177
Guymon, Linda	05-80	V-179
H_____, W. L.	05-286	V-367
Hafen, Eldon E.	05-32	V-148
Hall, Rosanne	05-73	V-176
Hamblin, Gloria	05-56	V-166
Hamblin, Ina	05-171	V-242
Hammon, Christine	05-141	V-216
Hammon, George	05-138	V-24
Hammon, George R.	05-142	V-216
Hammon, Marie	05-247	V-294
Hammon, Yvonne	05-239	V-290
Harrington, Ken	05-79	V-179
Harrington, Denise	05-81	V-180
Hatch, Brent	05-86	V-188
Hatch, Mae Ray	05-65	V-172
Hatch, Rosalie	05-309	V-378
Heaton, Raymond	05-18	V-141
Heaton, Wendy	05-89	V-190
Helms, Robert J.	05-319	V-383
Herrington, Pat	05-71	V-175
Heyborne, Loyd	05-108	V-199
Higley, Al	05-120	V-205
Holm, Kris Anthony	05-196	V-269
Holmes, Dale	05-69	V-174
Honey, Greg	05-58	V-167
Houston, Joe	05-129	V-210
Hoyt, Jason	05-51	V-164
Hudson, Debra D.	05-66	V-172
Huntington, Ron	05-29	V-147
Ingersoll, Jule	04-26	V-118
Jackson, D. Scott	05-24	V-144
Jackson, Mervin	05-94	V-192
Jacobson, John	05-97	V-194
Jepsen, Reid	05-323	V-385
Jessop, Glade R.	05-300	V-374
John, Eric	05-265	V-351
John, Eura Lee	05-35	V-150
Johnson, _____	05-263	V-350
Johnson, Bernice	05-72	V-175
Johnson, Harold J.	05-85	V-188
Johnson, Karl	05-127	V-209
Johnson, Ken	05-272	V-354
Johnson, Lisa	05-153	V-233
Johnson, Owen	05-111	V-201
Johnson, Rae Lene	05-25	V-145
Johnson, Scott	05-116	V-203
Johnson, Tami	05-299	V-373
Johnson, Troy W.	05-150	V-232
Jones, Dennis	05-07	V-135
Jones. J. R.	05-310	V-379
Jones, Lynette	05-308	V-378
Kapcsos, Cheryle	05-140	V-215
Kelly, Norlean	05-302	V-375
Kleinman, ____	05-297	V-372
Knudson, Elizabeth	05-123	V-207
Knudson, Roger	05-122	V-206
Knudson, Roger C.	05-174	V-244
Larsen, _____	05-118	V-204
Larsen, Barbara	05-182	V-248
Lawrence, Dr. William D.	05-49	V-162
Lawrence, Mary	05-05	V-134
Levanger, Earl	05-139	V-215
Lewis, Sue	05-274	V-355
Little, Larry	05-133	V-212
Lopeman, Ray	04-06	V-68
M_____, Jay M.	05-320	V-384
Maddox, John D.	05-64	V-171
Martin, Beth W.	05-288	V-368
Martin, C. G.	05-157	V-235
Martin, Glen	05-151	V-232
Martinez, Kim & Larry Ward	04-19	V-107
McCormick, Charles	05-104	V-197
McDonald, Lyall	05-273	V-355
Miller, Pam	05-128	V-209
Miller, Roy	05-14	V-139
Moore, Ward	05-30	V-147
Morris, Carlene P.	05-54	V-165
Motter, Joe	03-05	V-41
Nagiller, Sandra J.	05-184	V-249
Nessen, Carol L.	05-38	V-151
Olsen, Donald C.	05-47	V-160
Palmer, Brian	05-301	V-374
Palmer, Kenneth V.	04-09	V-71
Palmer, Peggy	05-172	V-243
Panpein, John	04-31	V-127
Pelech, Walter and Dorothy	04-02	V-58
Petition 1	04-15	V-105
Petition 3	04-17	V-106
Petition 2	04-16	V-105
Petition 4	04-18	V-106

INDEX TO COMMENTS (continued)

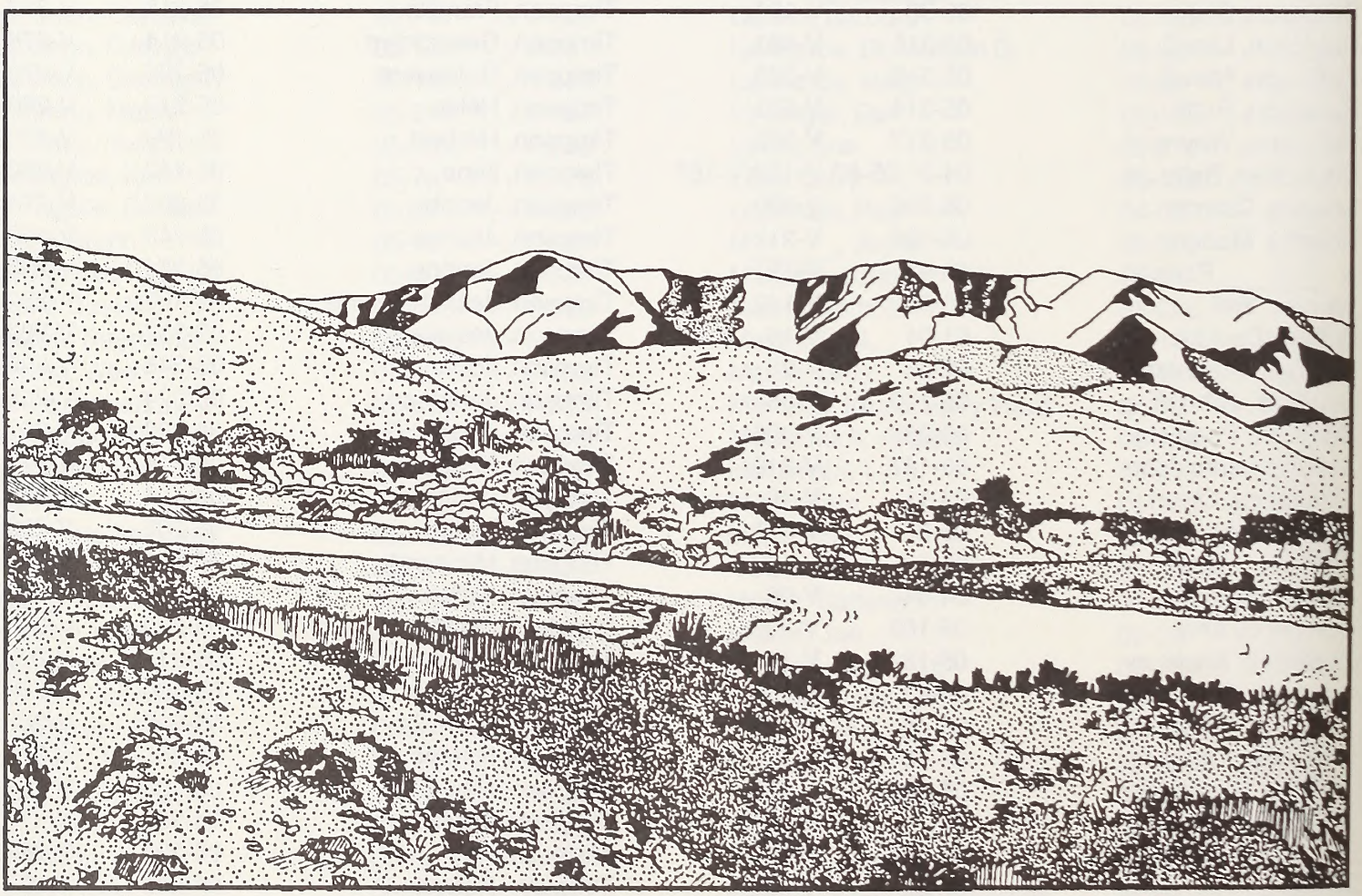
INDIVIDUALS

Pillmore, Donn M.	05-156	V-235
Pillmore, Donn M. & Melanie	04-23	V-113
Pillmore, Melanie	05-158	V-236
Porter, Debbie	05-295	V-371
Pugh, Duff	05-311	V-379
Purvis, Betty	05-74	V-176
Raisch, Jaun	05-115	V-203
Ramsay, Colleen	05-112	V-201
Randall, Howard	05-261	V-349
Ray, Bobett	05-90	V-190
Ray, Ross R.	05-143	V-217
Reber, Bradley	05-287	V-367
Redd, Amy	05-313	V-380
Rider, Vola B.	05-316	V-382
Riding, Katrina	05-166	V-240
Rieb, Ronald	05-11	V-137
Rinker, Karen	05-124	V-207
Ripka, Robert R.	05-10	V-137
Ripper, Bernie	05-92	V-191
Ripper, Dorthy	05-113	V-202
Robinson, Blake	05-98	V-194
Robinson, Lisa C.	05-315	V-381
Robinson, Nanell	05-318	V-383
Robinson, Ruth	05-314	V-381
Robinson, Wayne H.	05-317	V-382
Roundtree, Betty Jo	04-21;05-57	V-112;V-167
Roundy, Damon	05-290	V-369
Roundy, Marlene	05-134	V-212
S_____, Robert	05-91	V-191
Sawyer, Verl	05-33	V-149
Schein, David L.	01-01	V-10
Schmidt, Stephen	02-05	V-28
Schmutz, John W.	05-279	V-363
Schmutz, Peggy L.	05-283	V-365
Schoppmann, John	05-147	V-219
Severance, Owen	03-11	V-46
Sides, Terry J.	05-67	V-173
Slavens, J. Dean	05-12	V-138
Smith, Roger B.	04-04	V-66
Sorenson, Amy	05-162	V-238
Sorensen, Sheldon	05-163	V-238
Spencer, Clarence	05-41	V-153
Spencer, William D.	05-46	V-159
Stalnaker, Tracy	05-70	V-174
Steuber, Loretta C.	05-305	V-376
Stewart, Laurie	05-14	V-202
Stewart, Richard D.	05-326	V-387
Stewart, Rick	05-02	V-132
Stirland, Kortney	05-119	V-205
Stred, Glen	05-304	V-376
Strickland, Paul and Martha	02-03	V-25
Stubbs, Heather	05-233	V-287
Stud, Robert	05-306	V-377
Swain, Judith M.	05-84	V-186
Swanson, John R.	03-02;04-05	V-37;V-68
Swapp, David R.	05-327	V-387
Swapp, Geneive	05-325	V-386
Tate, Jack	05-135	V-213
Taylor, D.	05-181	V-247
Thebeau, Jackie	05-177	V-245
Timpson, _____	05-210	V-276
Timpson, _____	05-226	V-284
Timpson, Allen	05-251	V-296
Timpson, Benjamin	05-212	V-277
Timpson, Beverley	05-193	V-267
Timpson, Charles	05-331	V-389
Timpson, Christene	05-195	V-268
Timpson, David	05-220	V-281
Timpson, Dianne	05-249	V-295
Timpson, Donna	05-197	V-269
Timpson, Donna	05-225	V-283
Timpson, Elizabeth	05-255	V-298
Timpson, Franklin	05-213	V-277
Timpson, Gewndolyn	05-214	V-278
Timpson, Guinevere	05-198	V-270
Timpson, Helen	05-219	V-280
Timpson, Herbert	05-199	V-270
Timpson, Ilene	05-242	V-292
Timpson, Jacob	05-207	V-274
Timpson, Jashua	05-243	V-292
Timpson, Jeanne	05-254	V-298
Timpson, Jeanetta Anne	05-222	V-282
Timpson, Jessikah	05-237	V-289
Timpson, John	05-248	V-295
Timpson, Jonathan	05-224	V-283
Timpson, Joseph D.	05-223	V-282
Timpson, Kristene	05-215	V-278
Timpson, Lodema	05-194	V-268
Timpson, Lydia	05-202	V-272
Timpson, Margaret	05-244	V-293
Timpson, Marie	05-204	V-273
Timpson, Marie	05-229	V-285
Timpson, Marion	05-217	V-279
Timpson, Mary	05-190	V-266
Timpson, Michelle	05-232	V-287
Timpson, Naomi	05-205	V-273
Timpson, Newel	05-192	V-267
Timpson, Rachel	05-203	V-272
Timpson, Ray	05-235	V-288
Timpson, Robert	05-253	V-297
Timpson, Robert	05-206	V-274
Timpson, Rose	05-191	V-266
Timpson, Ruth	05-200	V-271
Timpson, Ruth	05-250	V-296

INDEX TO COMMENTS (continued)

INDIVIDUALS

Timpson, S_____	05-211	V-276
Timpson, Samantha	05-208	V-275
Timpson, Samuel	05-252	V-297
Timpson, Sarah	05-227	V-284
Timpson, Sharon	05-230	V-286
Timpson, Susan	05-330	V-389
Timpson, Susie	05-245	V-293
Timpson, Susie	05-218	V-280
Timpson, Theral	05-201	V-271
Timpson, Theral	05-188	V-265
Timpson, Theral Ray	05-221	V-281
Timpson, Thomas	05-209	V-275
Timpson, Thomas	05-228	V-285
TouTay, Farel	05-144	V-217
Trujello, Rolain	05-312	V-380
Vaughn, John O.	04-27	V-119
Vincent, Vince	05-39	V-152
Vorus, Jack A.	05-42	V-153
Ward, Steven	05-121	V-206
Waters, Lorin	05-159	V-236
Waters, Roger	05-167	V-240
Welch, Neidra	05-43	V-154
Wendt, Gene I.	04-11	V-85
White, Cindy	05-271	V-354
Williams, _____	05-291	V-369
Williams, Mrs. G. Dawn	05-52	V-164
Williams, Stephen M.	05-187	V-264
Willis, James H.	05-19	V-142
Winkler, David W.	05-289	V-368
Woodward, Bob	04-14	V-104
Worthen, Kerry	05-20	V-142
Wright, Tony	05-76	V-177



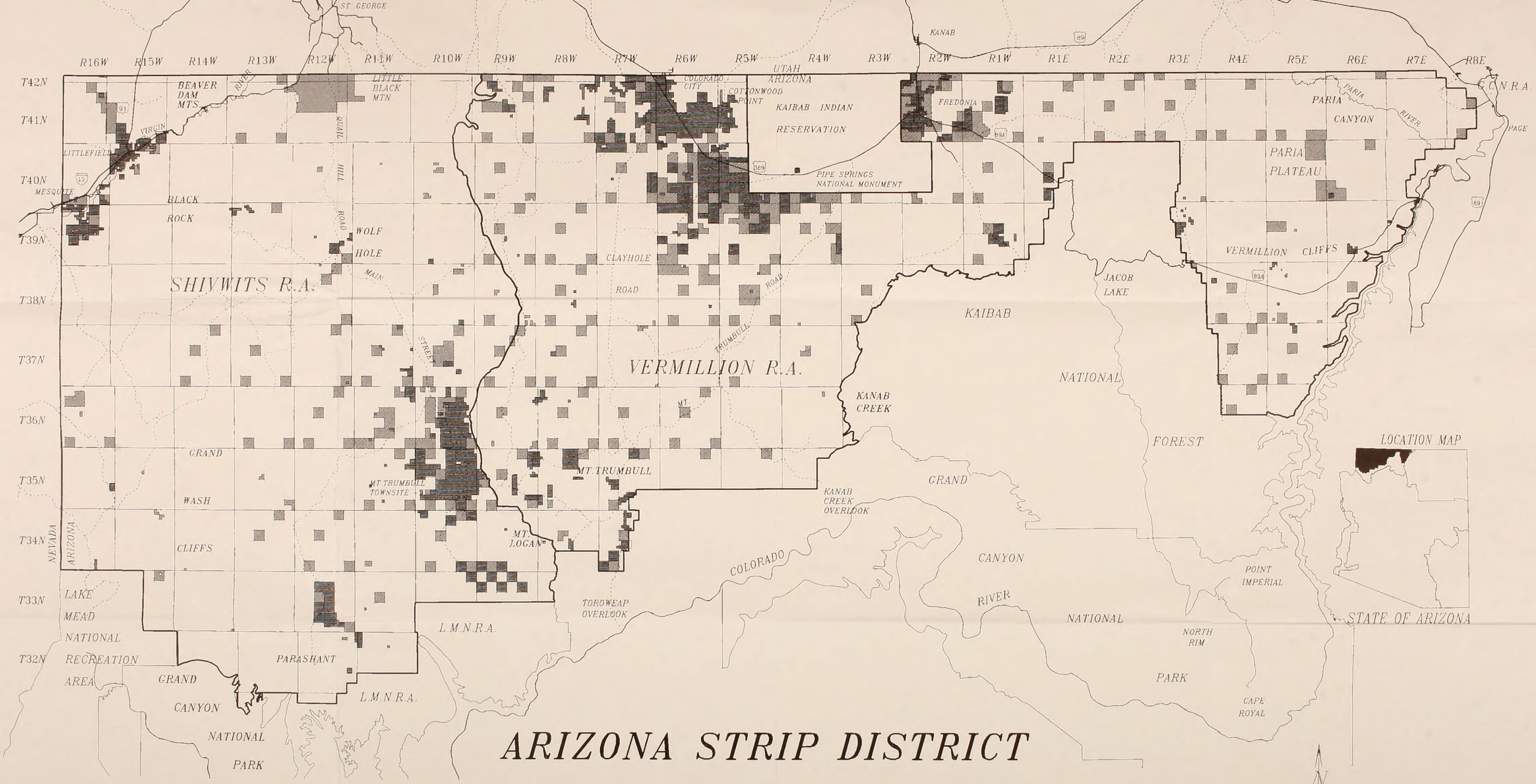
INDEX

Air Quality III-14
Alternative S-2; II-3; II-4
Areas of Critical Environmental Concern (ACEC) S-3; II-6; II-12; II-17; II-18; II-6; II-40;A-15
Consultation and Coordination V-3; V-5; V-9
Cultural Resources S-3; I-5; II-11; III-7; IV-6
Cumulative Changes ..... III-31 to III-36; IV-35 to IV-38
Desert Bighorn Sheep II-27; III-21; IV-17
Desert Tortoise ..... II-16; II-17; III-16; IV-9 to IV-11; A-55 to IV- 59
Easements II-34; A-68
Fire Management II-35; III-36
Gypsum III-5; III-9; A-75
Hazardous Material II-37
Issues ..... I-2; I-4; I-5; II-4 to II-6
Land Ownership I-1; I-2; III-1; IV-1
Locatable Mineral Development ..... I-4; II-10; III-3 to III-7
Management Guidance ..... II-3; II-7 to II-39
Mule Deer II-27; III-22
Off-Highway Vehicle Use I-4; II-32; III-25
Planning Process Overview S-1; I-2; A-77
Ponderosa Pine ..... II-20; III-19; IV-12 to IV-15
Pronghorn II-27; III-21
Rangeland Management ..... I-1; II-21 to II-23
Recreation Opportunity Spectrum ..... II-29 to II-31; III-22 to III-24
Recreation Use ..... III-22 to III-27
Remoteness II-2; II-30; II-31; III-23; III-33; IV-37
Resource Conservation Areas ..... S-3; II-12; II-15; II-29; II-30; II-47 to II-49; IV-14; IV-15
Riparian Habitat ..... II-18; III-17; III- 18; IV-11; IV-12
Special Recreation Management Areas ..... II-30; II-47 to II-49
Special Status Species ..... II-16; II-17; III-16; III-17; IV-9 to IV-11
Uranium ..... I-4;II-10; III-3 to III-8; IV-3 to IV-6
Vegetation III-11; III-12
Visual Resource Management Class ..... II-32; III-27; III-28; IV-23 to IV-26
Water Resources and Quality ..... II-3 to II-15; III-13; III-14; IV-7; IV-8
Watershed Condition ..... II-13 to II-15; III-12 to III-14; IV-7 to IV-9
Wild and Scenic Rivers ..... II-31; II-32; A-61 to A- 65
Wild, Free-Roaming Burros II-20; III-20; III-21
Wilderness ..... I-1; II-33; III-24 to III-27; IV-26; IV-27
Wildlife ..... II-25 to II-29; III-21; III-22; IV-16 to IV-18
Woodlands II-19; II-20; III-19; IV-12; IV-14

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

BLM-AZ-PT-91-002-1600

☆U.S. GOVERNMENT PRINTING OFFICE: 1991-573-989



ARIZONA STRIP DISTRICT

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
ST. GEORGE, UTAH
MAP PRODUCED BY:
Cartographic Output System

STATE LAND
PRIVATE LAND
DISTRICT BOUNDARY
PAVED HIGHWAY
PRIMARY UNPAVED ROAD

N

0 4 8 12 16 20
MILES
0 4 8 12 16 20
KILOMETERS